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Technical Note

1976-34

**Circular Polarization
Scattering Coefficients
for the Bistatic Scattering
of Electromagnetic Waves
from Perfectly Conducting Spheres**

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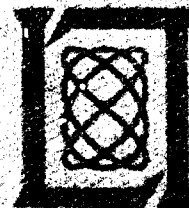
27 July 1976

Prepared for the Department of the Air Force
under Electronic Systems Division Contract F19628-76-C-0002 by

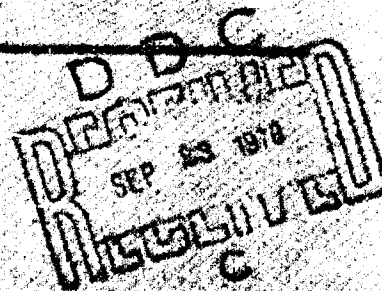
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FOR THE COMMANDER

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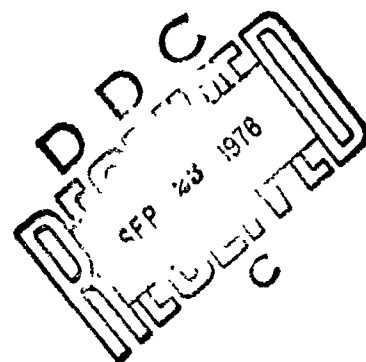
MASSACHUSETTS INSTITUTE OF TECHNOLOGY
LINCOLN LABORATORY

CIRCULAR POLARIZATION SCATTERING COEFFICIENTS
FOR THE BISTATIC SCATTERING OF ELECTROMAGNETIC WAVES
FROM PERFECTLY CONDUCTING SPHERES

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Group 95

TECHNICAL NOTE 1976-34

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ABSTRACT

The scattering by a number of perfectly conducting spheres has been calculated as a function of bistatic angle for both principal circular polarizations. Normalized radar cross section and scattering phase are tabulated for body circumference in wavelengths equal to 1.0(1.0)10.0, 15.0(5.0)50.0 with bistatic angles 0.0(1.0)180.0 degrees. Selected graphs precede the tables.

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I. INTRODUCTION

The most important of the bodies for which exact solutions are possible is the sphere. Calculations via the exact solution for scattering by perfectly conducting spheres are of great importance, both as a means of calibrating cross-section ranges and as a means of checking approximate methods of computation.

In the monostatic case, the two most complete tables of scattering coefficients for perfectly conducting spheres are those of Bechtel¹, whose tables cover the range $ka=0.2(0.02)50^*$, where ka is sphere circumference in wavelengths, and those of Rheinstein², whose tables cover the range $a/\lambda = 0.01(.01)19.00$, where a is the sphere radius and λ is the wavelength. Both these tables give the amplitude and phase of the scattered field as well as the radar cross-section; they differ in that Rheinstein has referenced his phase value to the sphere's center, while Bechtel's results yield phase referenced to the specular point. Tables which are more limited than the two mentioned above have been published by Goodrich, et al.³, by Crispin and Siegel⁴, and by Alder and Johnson⁵, the latter tables giving monostatic cross-sections of a variety of dielectric spheres as well as of perfectly conducting ones.

In the bistatic case, tables of scattering coefficients giving the amplitude and phase of the electromagnetic wave scattered by a perfectly conducting sphere have been published for principal linear polarization combinations. Despite a very limited range of sphere sizes and bistatic angles, the early data of Proudman, Doodson, and Kennedy⁶ are quite remarkable in view of the procedure for computation. In reference 7 tables are given of normalized echoing area and phase angle for sphere circumference $ka = 0.25(0.25)16.00$ with bistatic angles $= 0^\circ(30.0)180^\circ$. Those tables were based upon computations made at the Cornell Aeronautical Laboratory. Attendant with scattering studies conducted at the University of Manitoba, tables⁸ were compiled for a wide range of sphere sizes and bistatic angles. Normalized radar cross-section and scattering phase are presented for both principal linear polarizations for $ka = 1.0(1.0)10.0, 15.0(5.0)50.0$ with bistatic angles $= 0.0(1.0)180.0^\circ$. Graphs showing the bistatic dependence of normalized radar cross-section and scattering phase for $ka = 1.0(1.0)10.0$ precede the tables.

*The code to this convention is: initial value (increment) final value.

Interest has been generated in scattering behavior when antennas are circularly polarized. In the monostatic case of sphere scattering, the parallel circular polarization result is unchanged from the linear polarization result, and the opposite circular polarization return is identically zero [see Equations (1) and (2)]. The existing tables of reference 1 or 2 are appropriate for the non-trivial situation. In the bistatic case of sphere scattering, circular polarization data are completely defined by simple combinations of linear polarization data, and the calculations contained in reference 8 would apply. However, hand calculations combining phasors can be tedious, so the present table is offered.

Principal circular polarization data (normalized radar cross-section and scattering phase) were computed for $ka = 1.0(1.0)10.0, 15.0(5.0)50.0$ with bistatic angles $0.0(1.0)180.0^\circ$. Graphs showing the bistatic dependence of parallel and opposite circular RCS and phase for $ka = 1.0(1.0)10.0, 15.0$, and 20.0 precede the tables.

This report is intended to serve as a companion report to references 1 and 8. For this reason, we limit further discussion to those topics necessary in the use of the data presented.

II. NOTATION AND FORMULATION

Computations are based upon Stratton's⁹ formulation (modified for $e^{i\omega t}$ time dependence) with spherical Bessel functions expressed in finite-series representation. Reference 1 contains the details of the formulation for the interested reader.

An incident, monochromatic, plane wave having number k ($= \frac{2\pi}{\lambda}$ where λ is the wavelength) has been assigned the common $e^{i\omega t}$ time dependence. Real (REAL) and imaginary (IMAG) parts of the scattering coefficients were computed for E-plane and H-plane (principal linear polarization) configurations* as a function of bistatic angle.

*Since this polarization convention is uniformly accepted, we do not elaborate further (e.g., see the Appendix of Reference 10).

We seek the related quantities for the two circular polarization combinations (PP and OP) originating in the sense of these EM waves. By convention, PP or principal circular polarization obtains when transmitting and receiving antennas are circularly polarized with differing sense of rotation; OP or opposite circular polarization corresponds with circular antennas having the same sense. The equations which join circular and linear polarization scattering coefficients can be shown to be

$$\text{REAL } \frac{\text{PP}}{\text{OP}} = \frac{\text{REAL (H)} + \text{REAL (E)}}{2} \quad (1)$$

$$\text{IMAG } \frac{\text{PP}}{\text{OP}} = \frac{\text{IMAG (H)} + \text{IMAG (E)}}{2} \quad (2)$$

For comparison purposes, note that the phase of the scattered field defined by equations (1) and (2) was referenced to the center of the perfectly conducting sphere.

III. USE OF TABLES AND GRAPHS

The tables present bistatic scattering data according to polarization pairs (circular PP and circular OP, respectively) in increasing order of integral value of ka .

Beneath a major heading specifying polarization and ka lies a table consisting of five columns. The first column on the left contains the bistatic angle THETA in degrees: monostatic scattering or backscattering corresponds with THETA = 0° ; forward scattering corresponds with THETA = 180° . The fifth column lists radar cross-section (σ) normalized to its geometric optics value; i

$$\text{NRCS} = \frac{\sigma}{\pi a^2} \quad (3)$$

The fourth column gives the phase (PHASE) of the scattered field in degrees, modulus 360° and lying in the interval -180° to $+180^\circ$. Columns two and three present the real (REAL) and imaginary (IMAG) parts of the circular polarization scattering coefficients given by equations (1) and (2), where

$$\text{NRCS} = |\text{REAL} + i \text{IMAG}|^2 \quad (4)$$

$$\text{PHASE} = \tan^{-1} \left(\frac{\text{IMAG}}{\text{REAL}} \right) \quad (5)$$

and the sphere center is the phase reference.

The only errors incurred in evaluating the scattering coefficients result from roundoff and from truncation of the infinite series representation of spherical Bessel functions. An IBM 370/168 digital computer was programmed to generate scattering-coefficient data which are accurate to six significant figures.

Graphs preceding the tables permit a rapid assessment of the bistatic dependence of normalized radar cross-section and scattering phase over the range $ka = 1.0(1.0)10.0, 15.0, \text{ and } 20.0$ (see Figs. 1 through 24).

REFERENCES

1. M. E. Bechtel, "Scattering Coefficients for the Backscattering of Electromagnetic Waves from Perfectly Conducting Spheres," Cornell Aeronautical Laboratory Report No. AP/RIS-1 (December 1962).
2. J. Rheinstein, "Tables of the Amplitude and Phase of the Backscatter from a Conducting Sphere," Group Report 22G-16, Lincoln Laboratory, M.I.T. (19 June 1963), DDC AD-409820.
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TN-1976-34 (1)

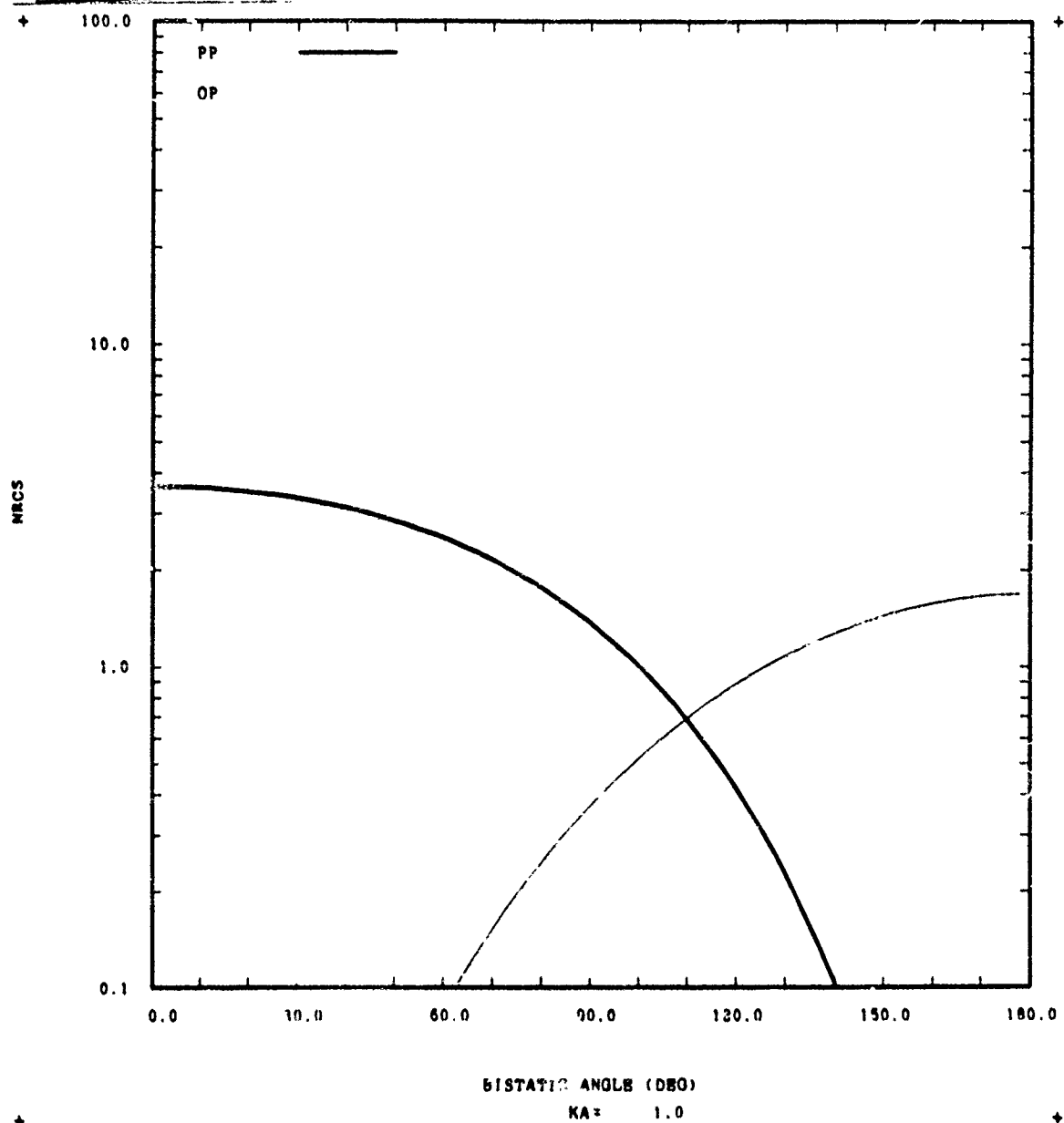


Fig. 1. Normalized radar cross-section vs. bistatic angle.

TN-1976-34 (2)

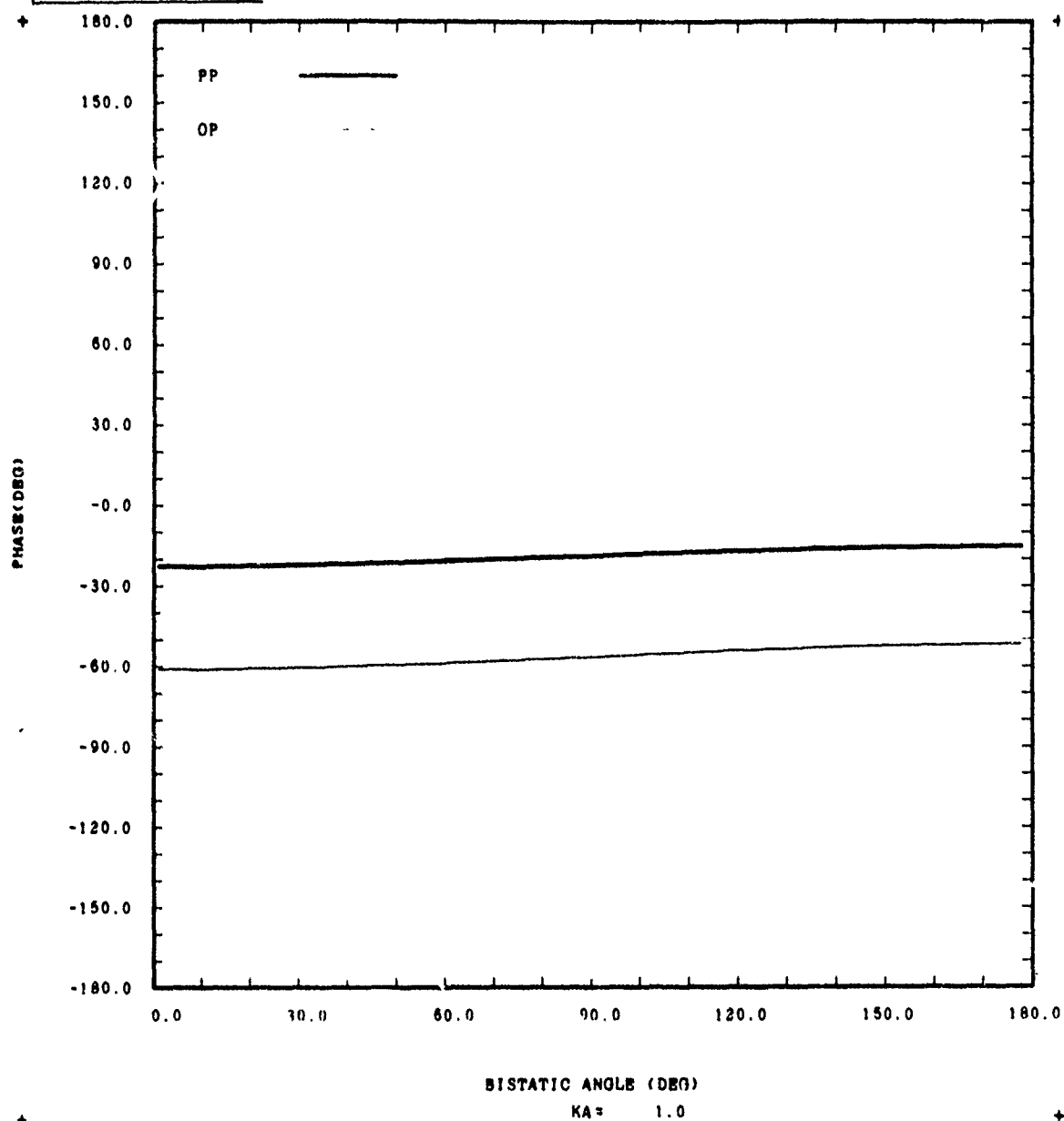


Fig. 2. Phase vs. bistatic angle.

TN-1976-34 (3)

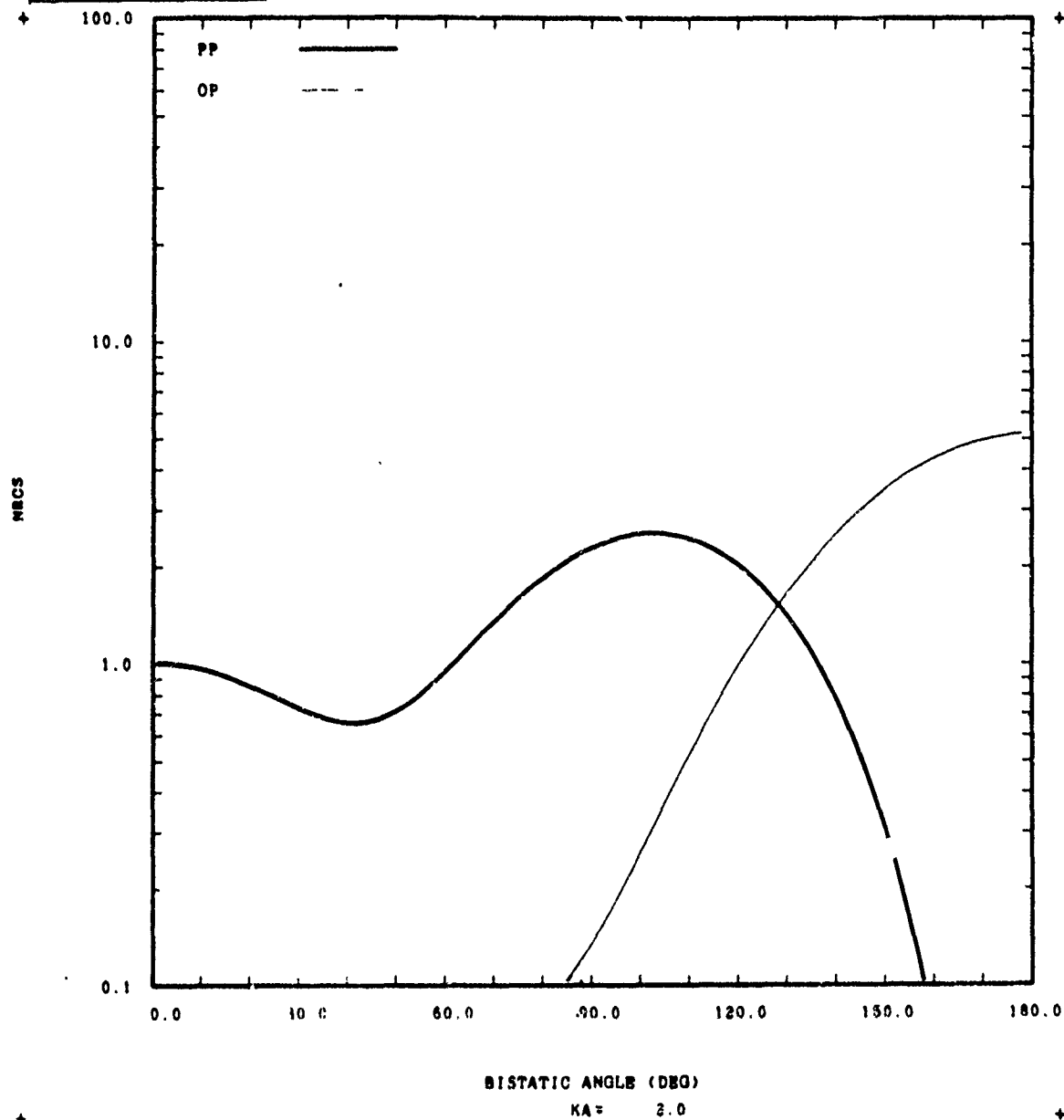


Fig. 3. Normalized radar cross-section vs. bistatic angle.

TN-1976-34 (4)

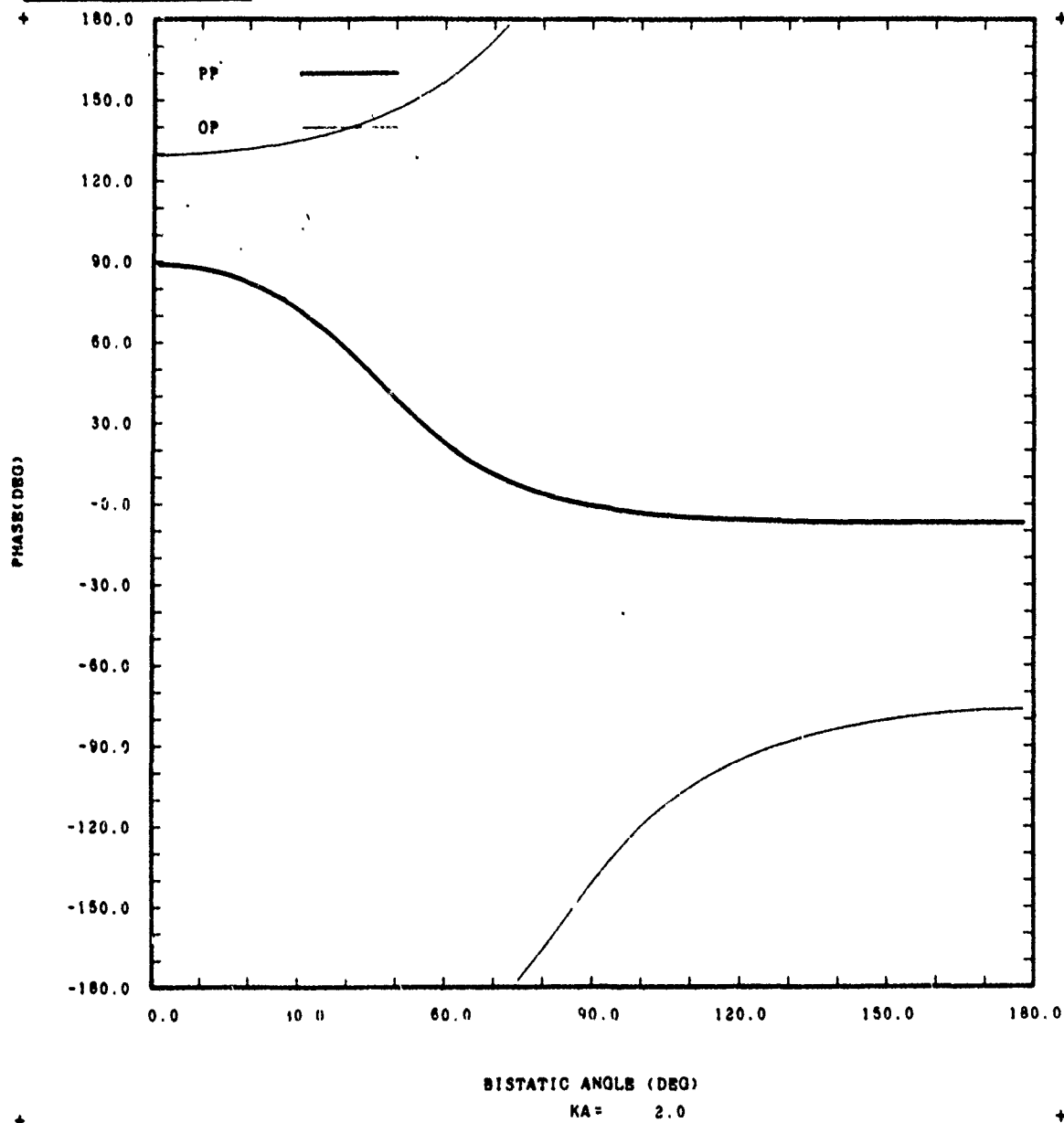


Fig. 4. Phase vs. bistatic angle.

TN-1976-34 (5)

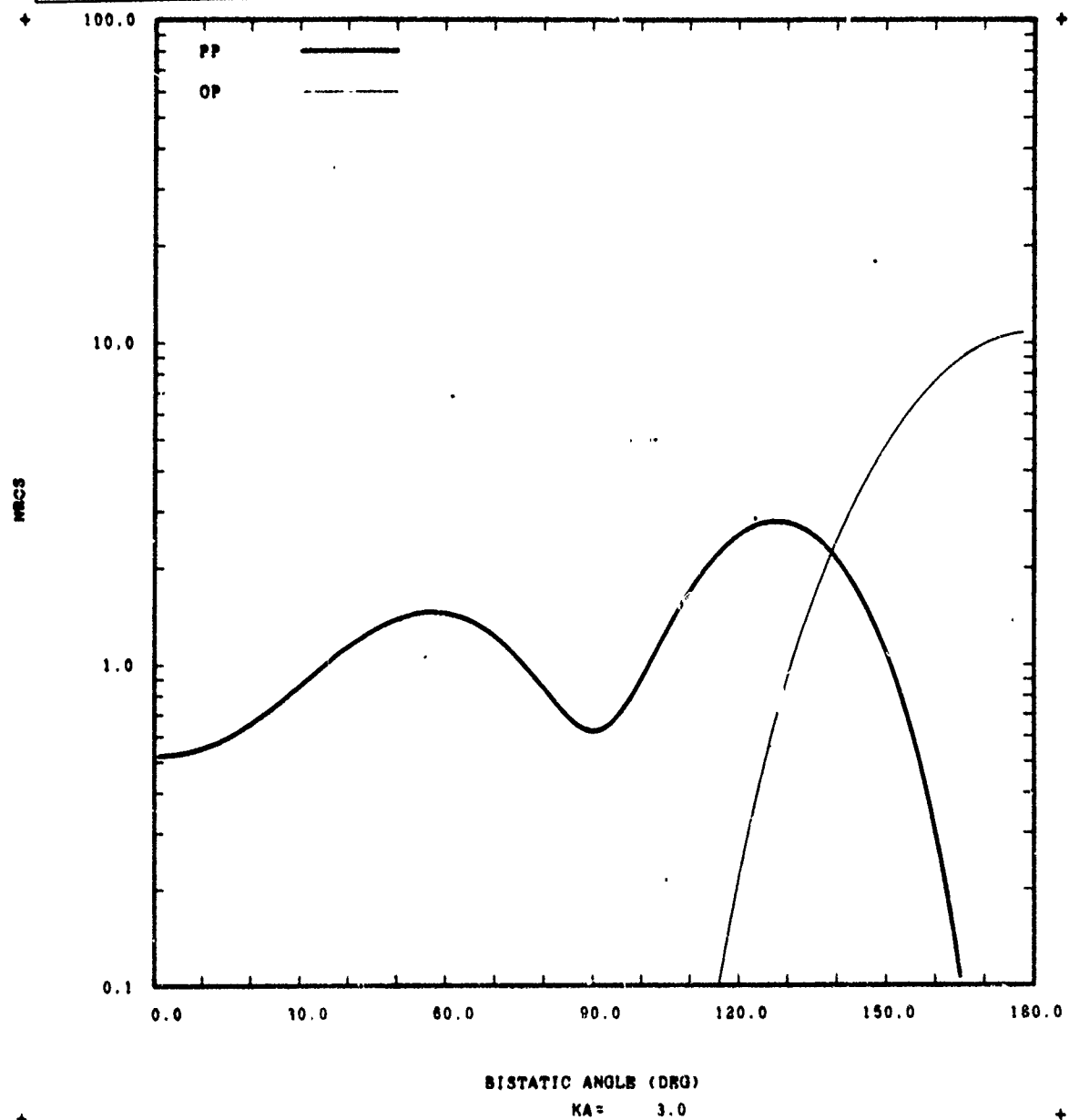


Fig. 5. Normalized radar cross-section vs. bistatic angle.

TN-1976-34 (6)

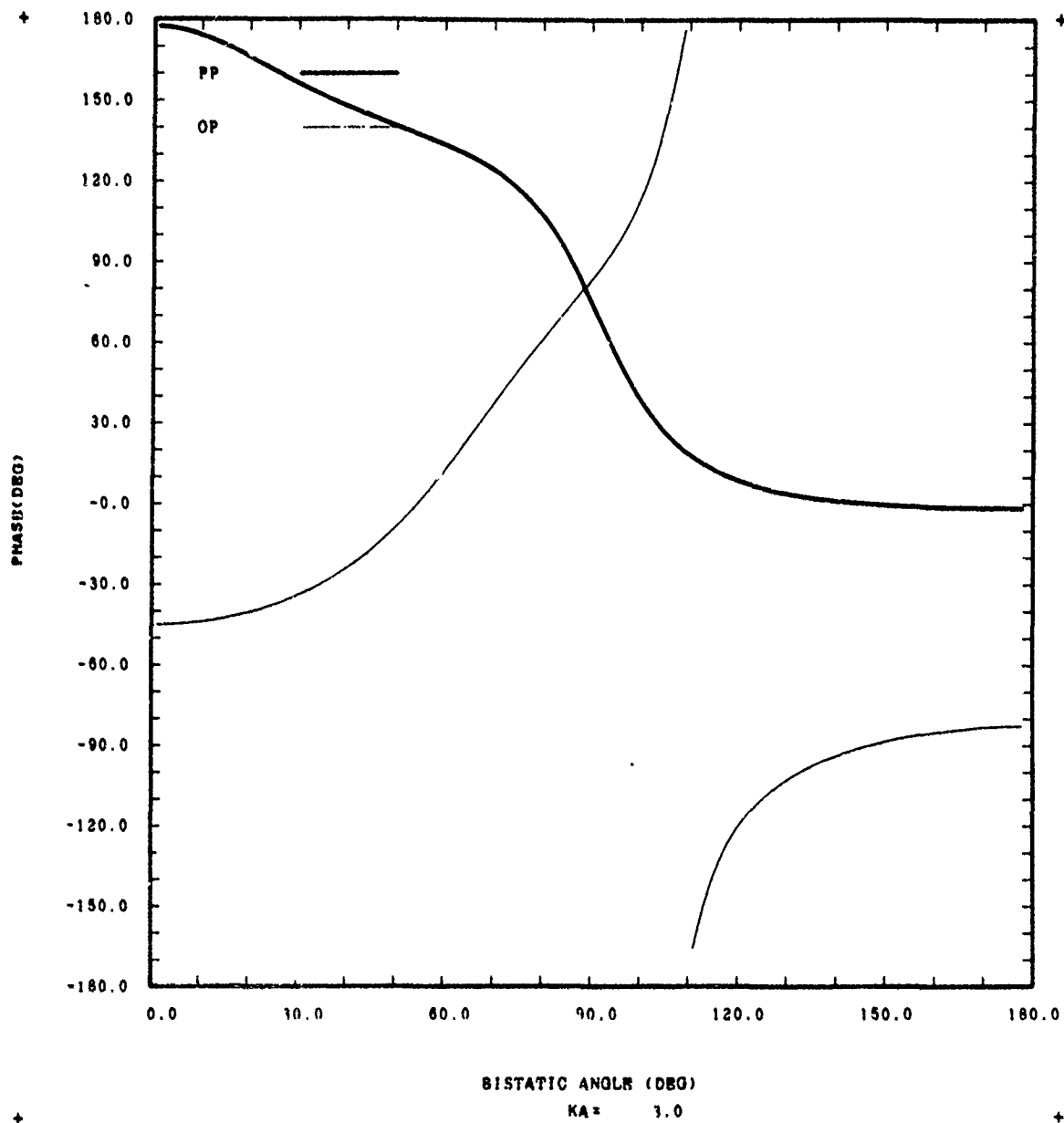


Fig. 6. Phase vs. bistatic angle.

TN-1976-34 (7)

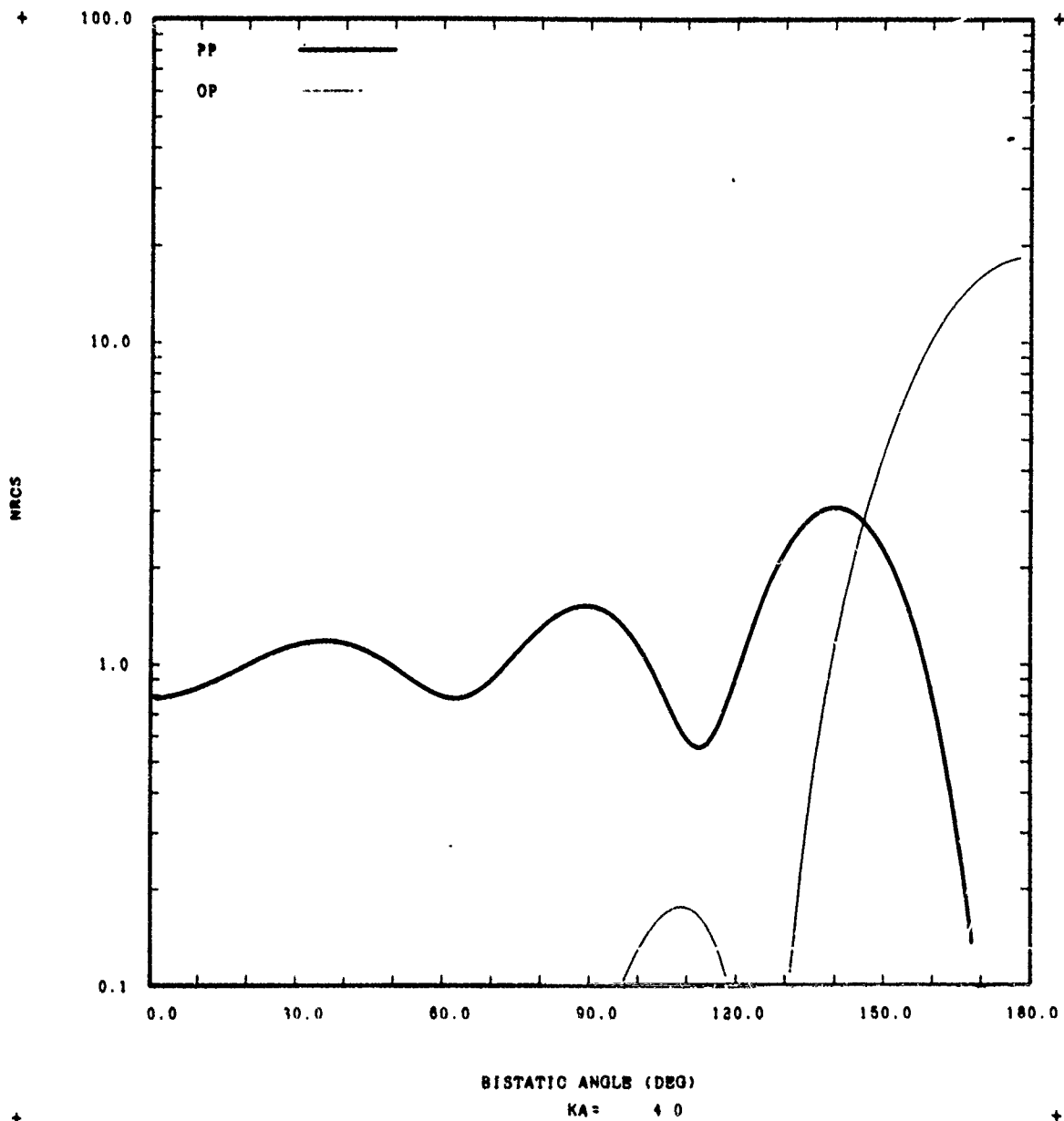


Fig. 7. Normalized radar cross-section vs. bistatic angle.

IN-1976-34 (7)

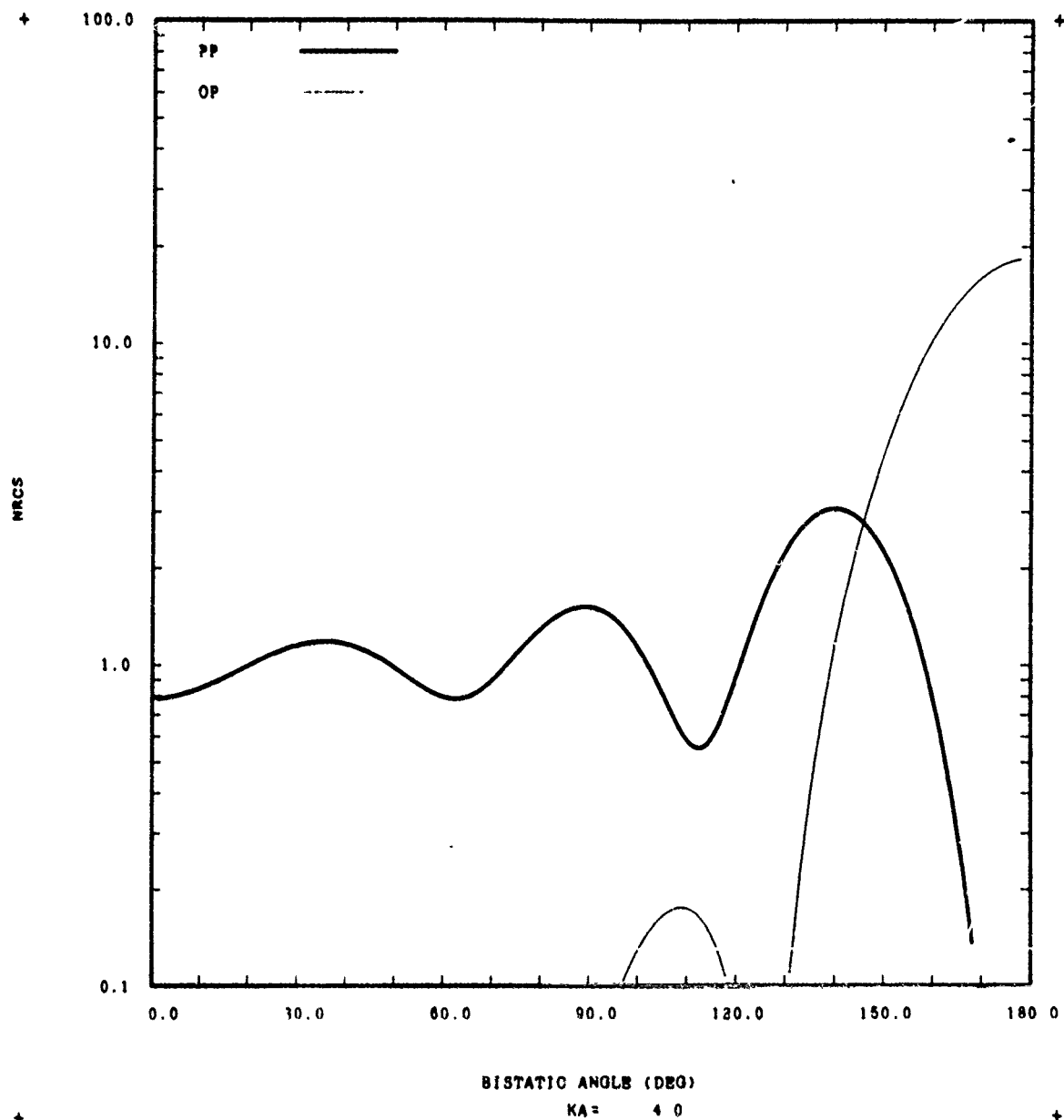


Fig. 7. Normalized radar cross-section vs. bistatic angle.

TN-1976-34 (8)

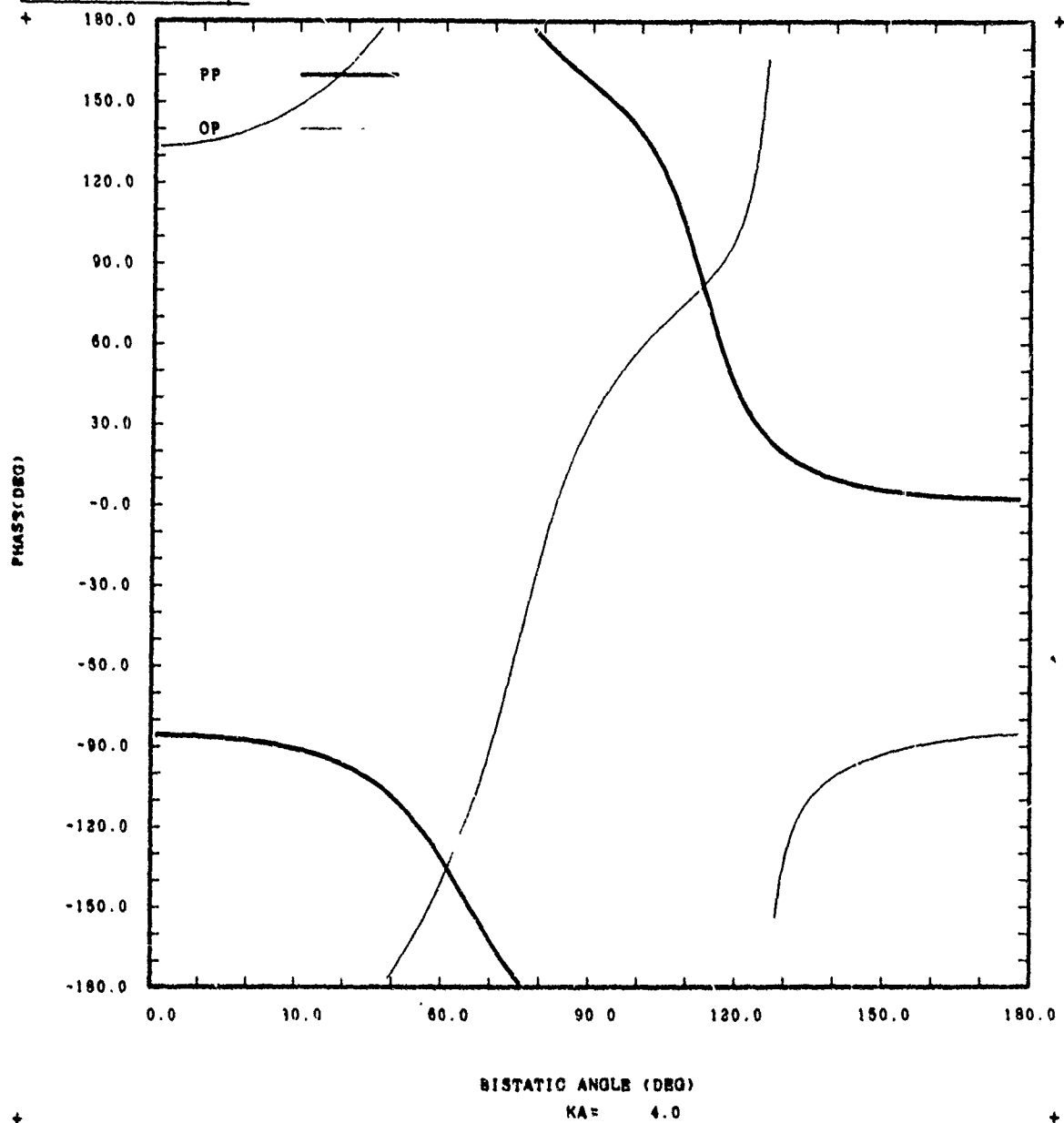


Fig. 8. Phase vs. bistatic angle.

TN-1976-34 (9)

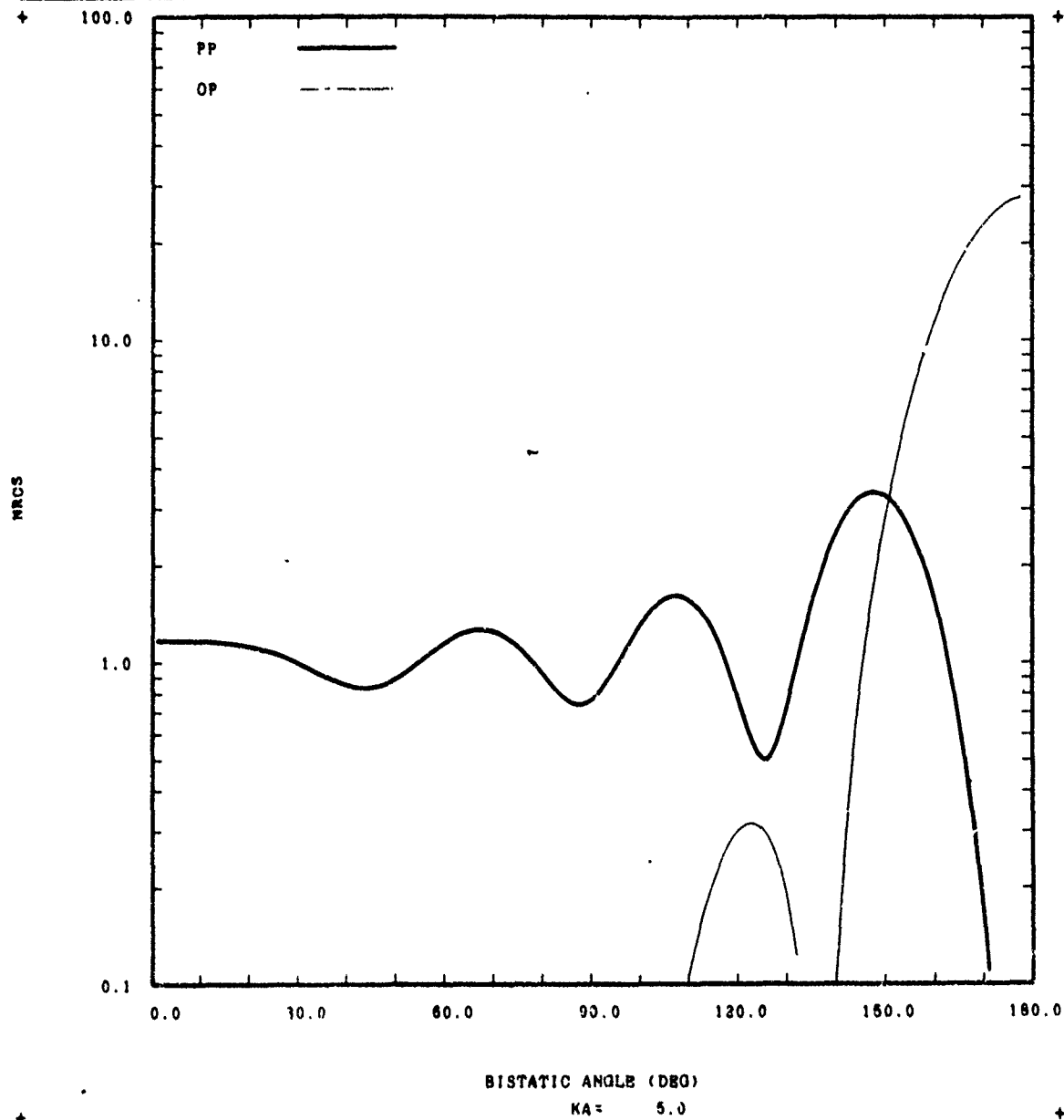


Fig. 9. Normalized radar cross-section vs. bistatic angle.

TN-1976-34 (10)

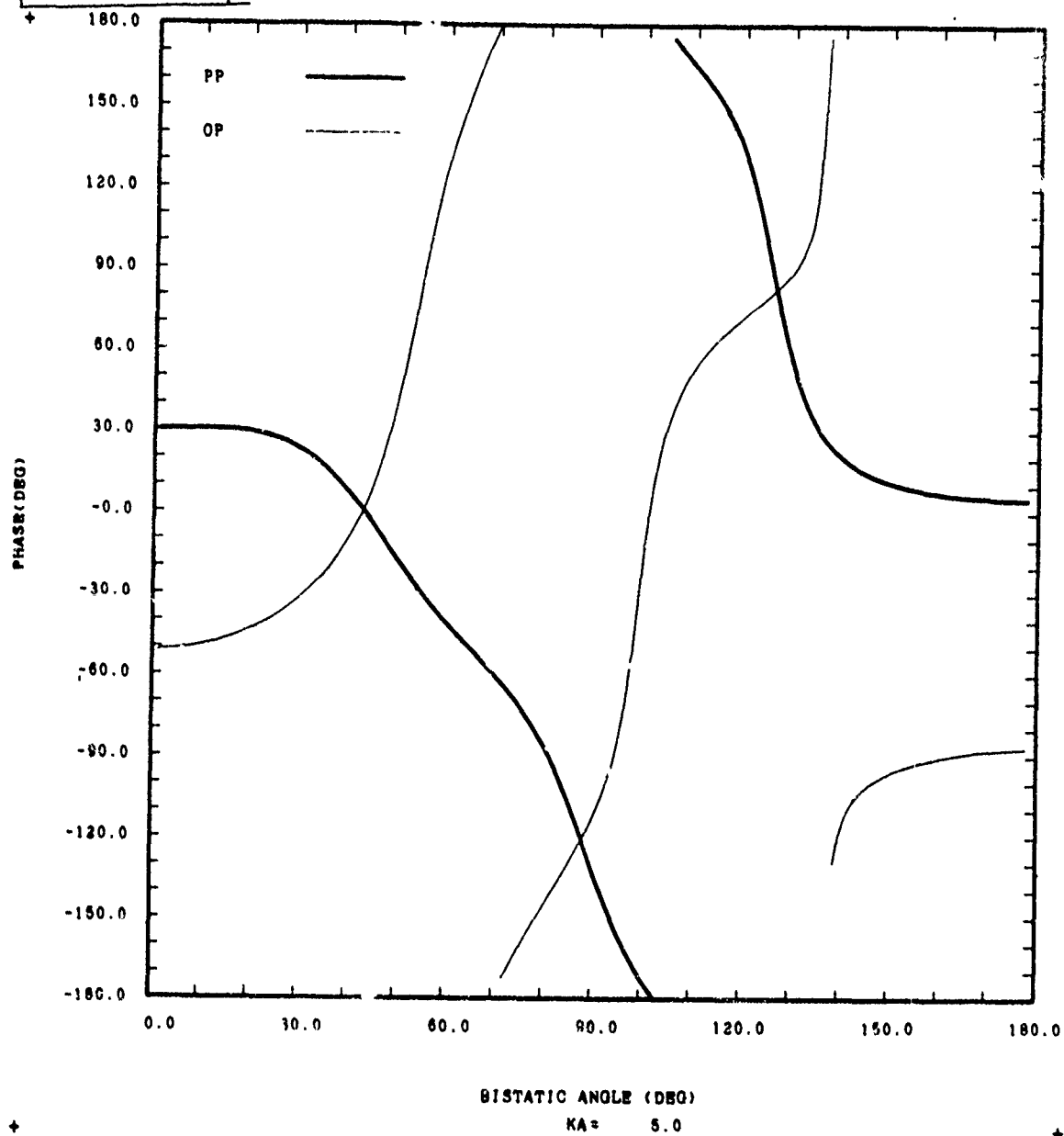


Fig. 10. Phase vs. bistatic angle.

TN-1976-34 (11)

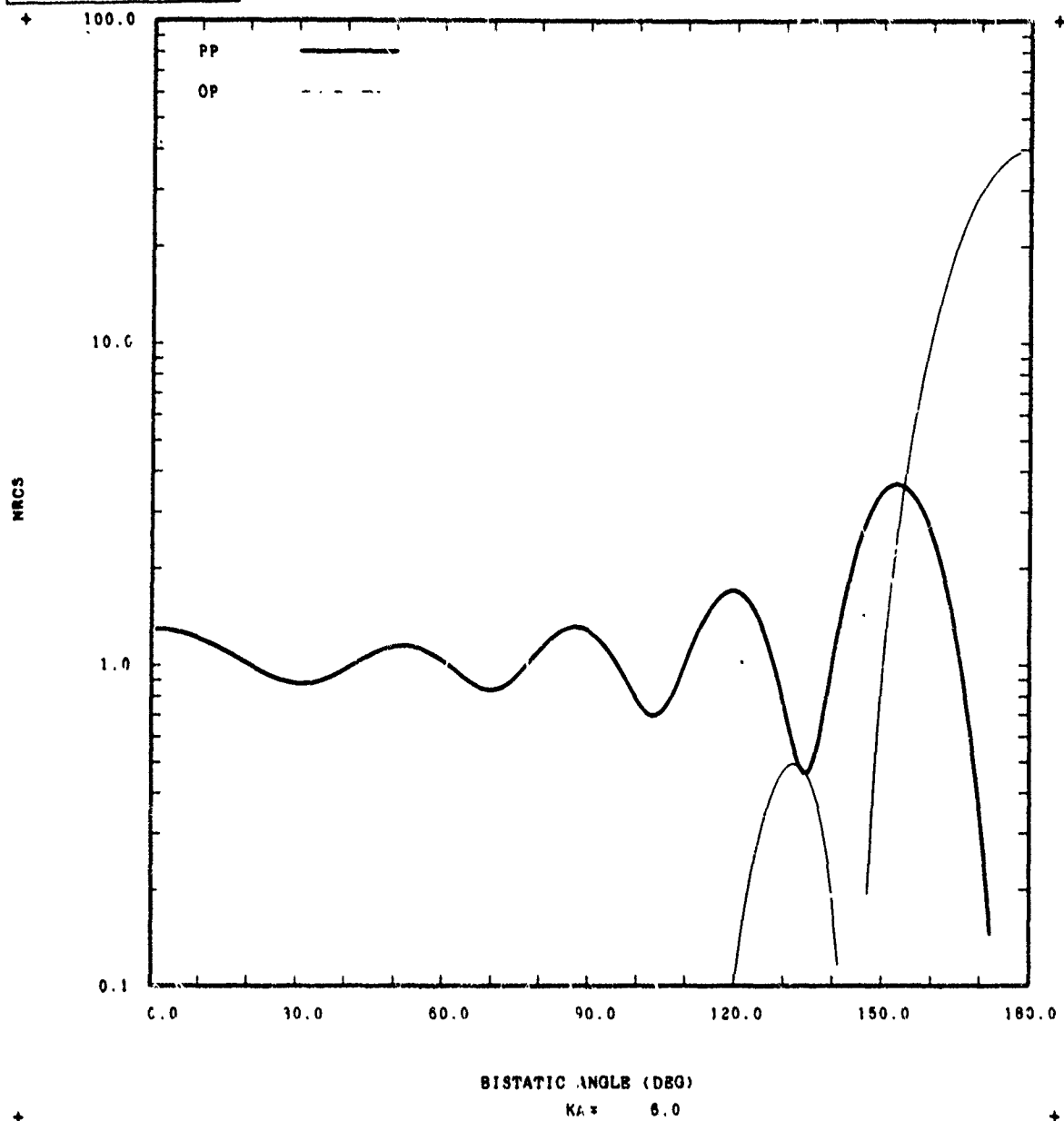


Fig. 11. Normalized radar cross-section vs. bistatic angle.

TN-1976-34 (12)

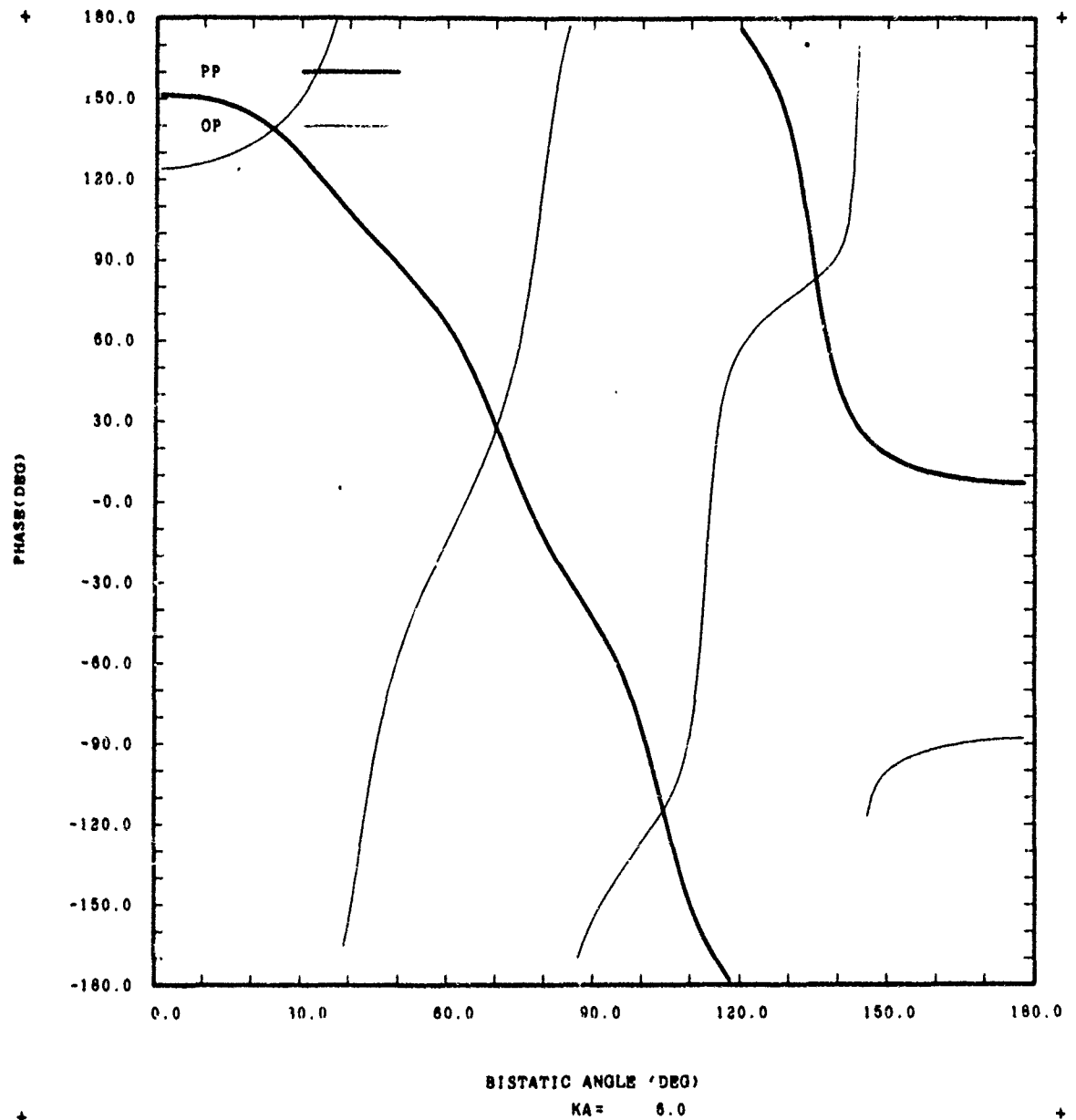


Fig. 12. Phase vs. bistatic angle.

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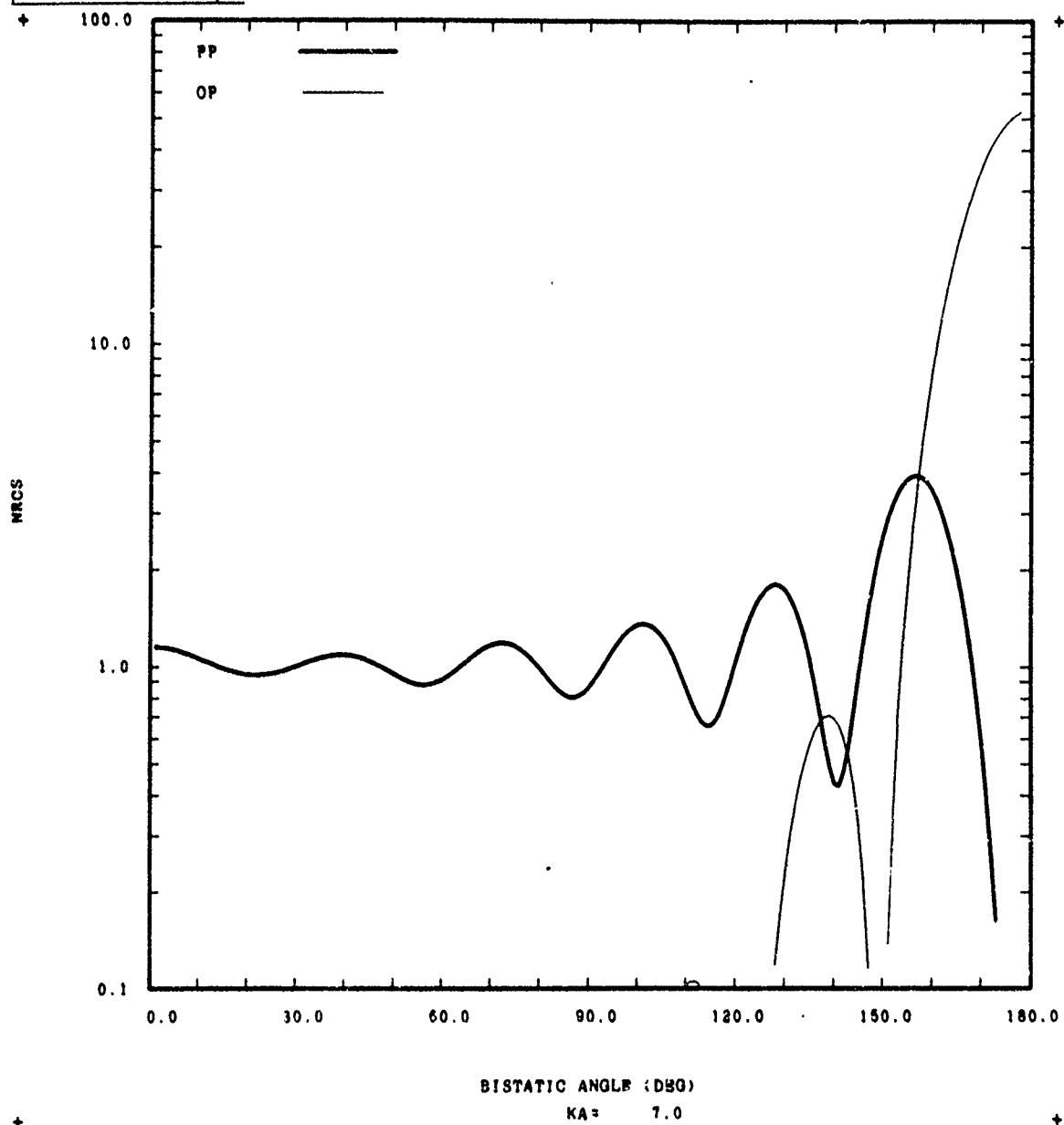


Fig. 13. Normalized radar cross-section vs. bistatic angle.

TN-1976-34 (14)

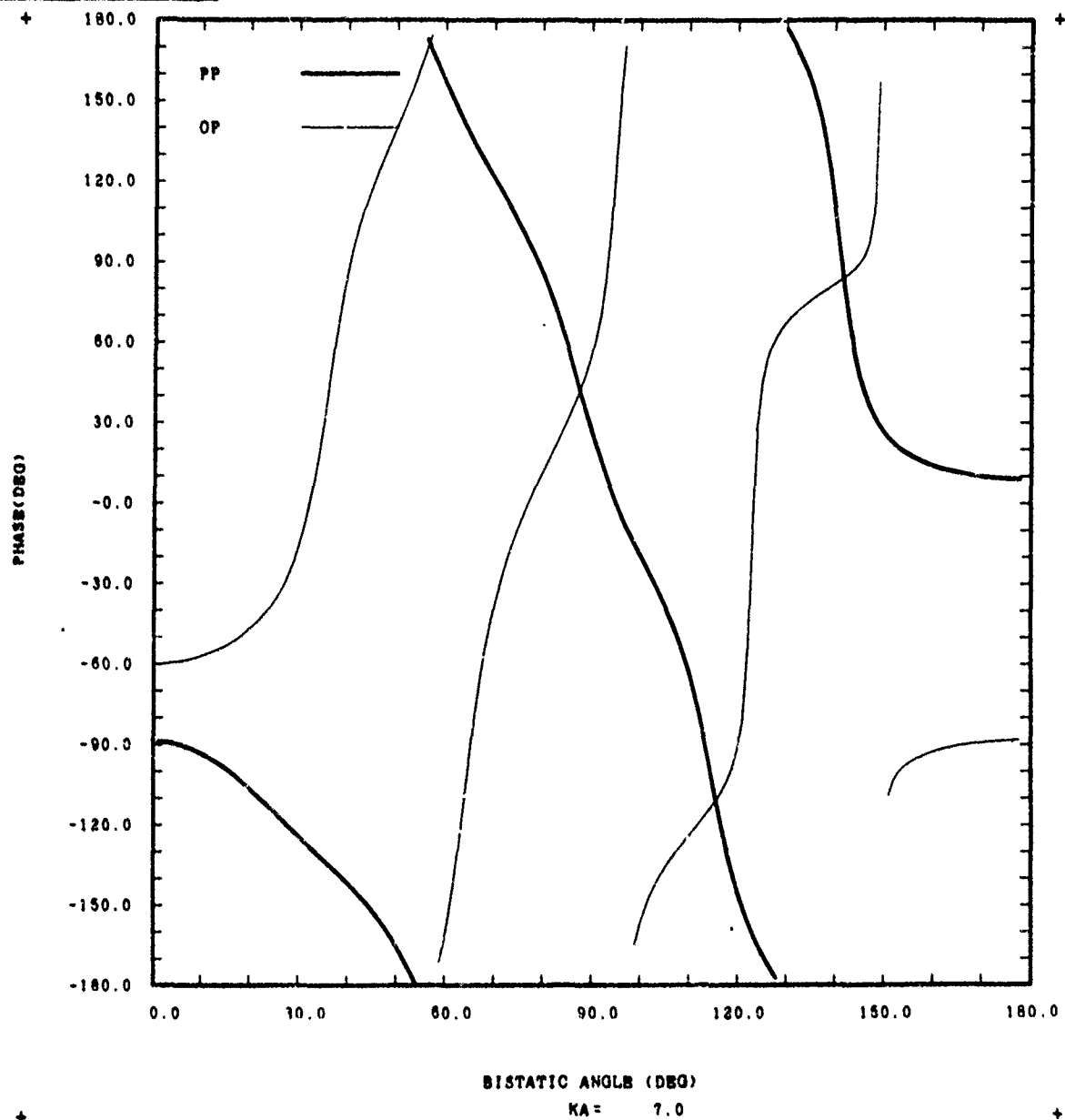


Fig. 14. Phase vs. bistatic angle.

IN-1976-34 (15)

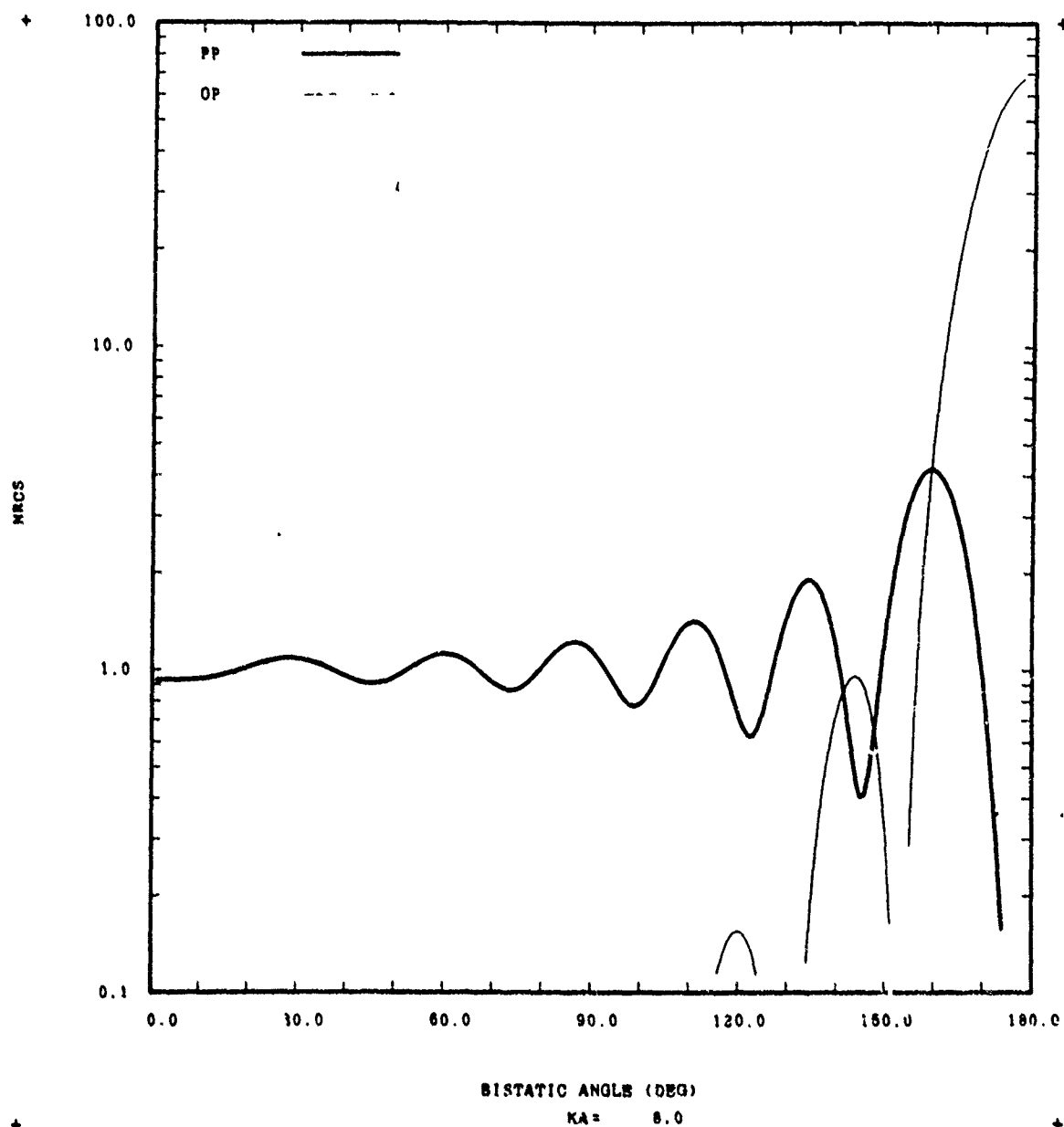


Fig. 15. Normalized radar cross-section vs. bistatic angle.

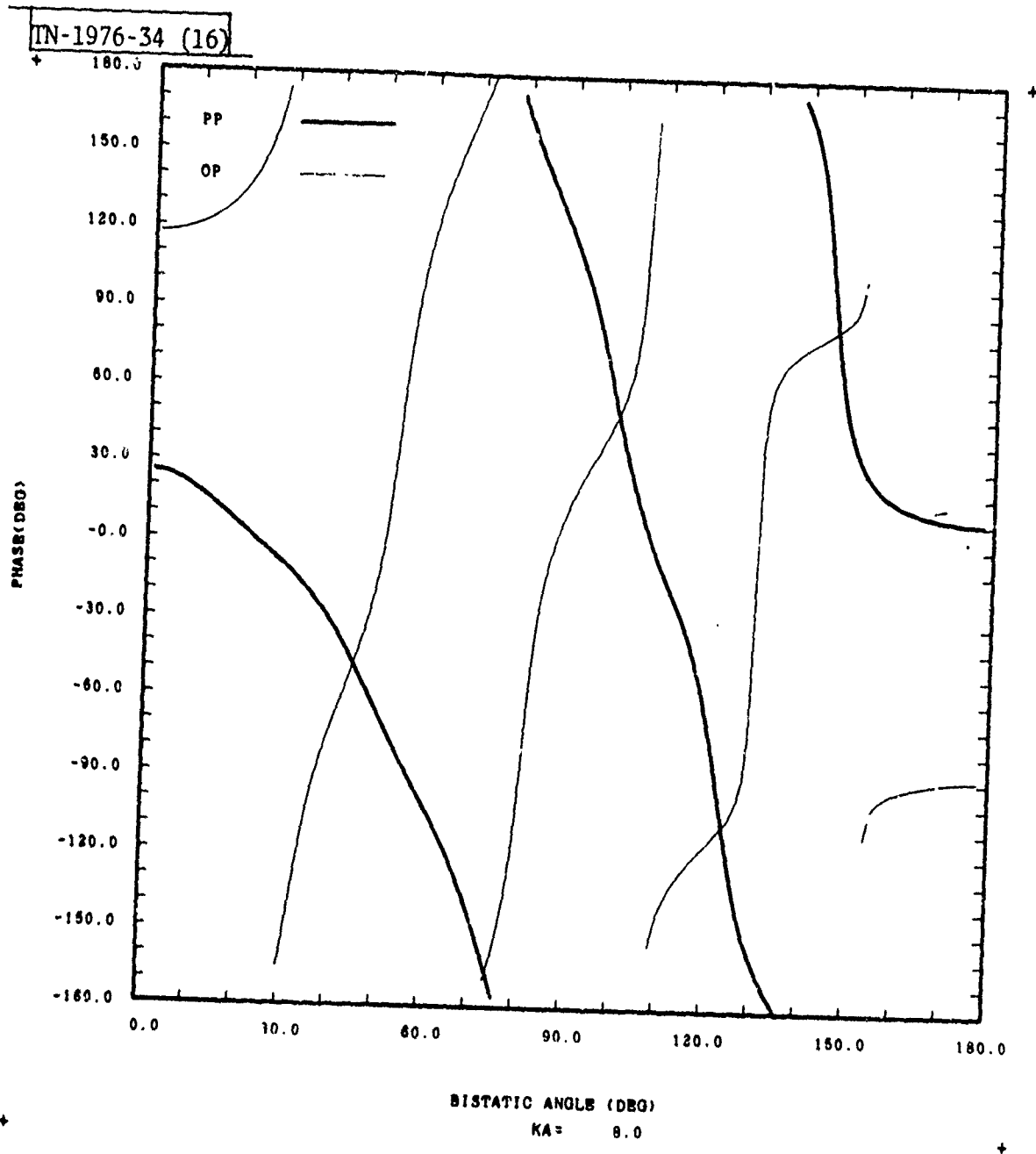


Fig. 16. Phase vs. bistatic angle.

TN-1976-34 (17)

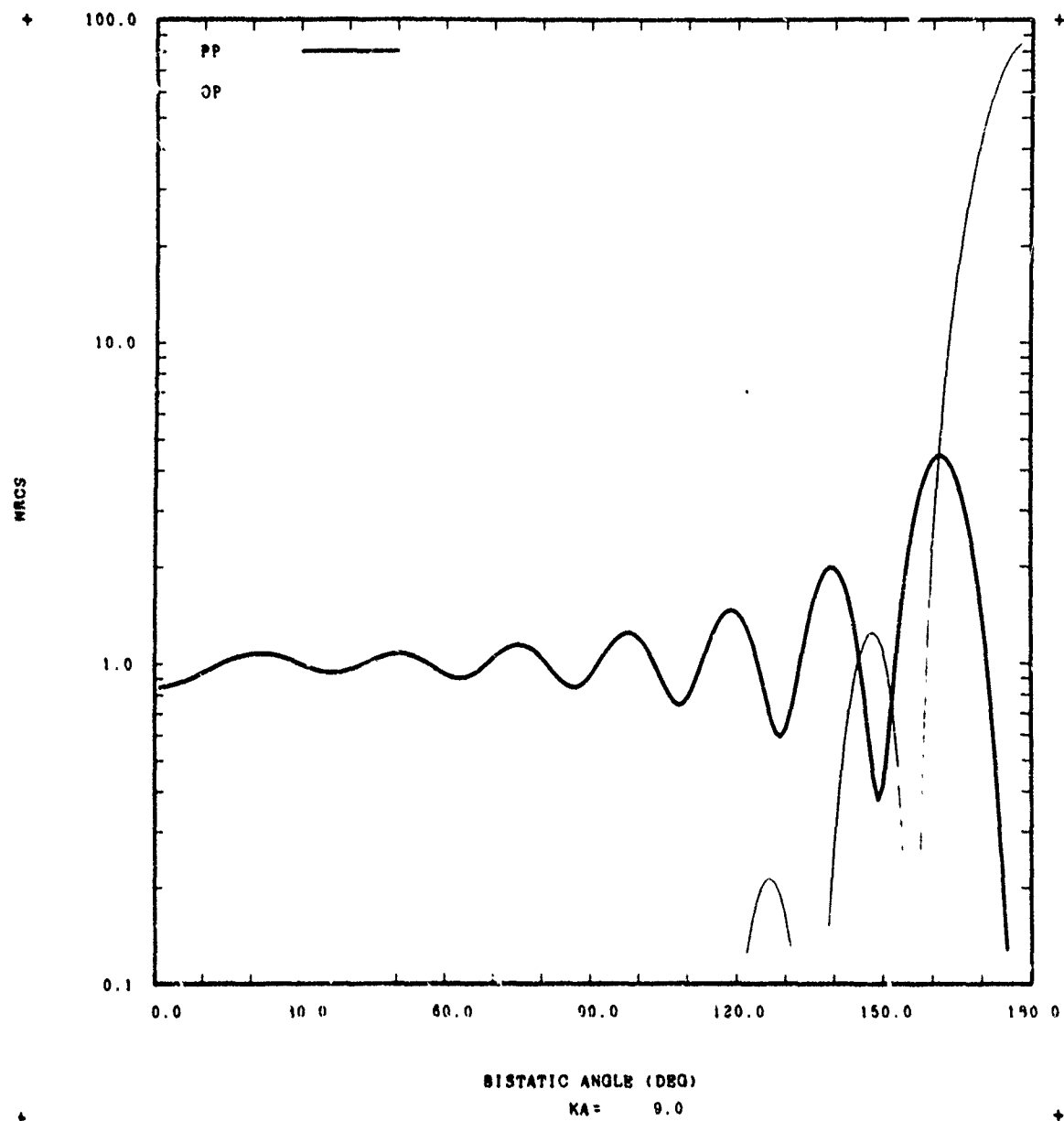


Fig. 17. Normalized radar cross-section vs. bistatic angle.

IN-1976-34 (18)

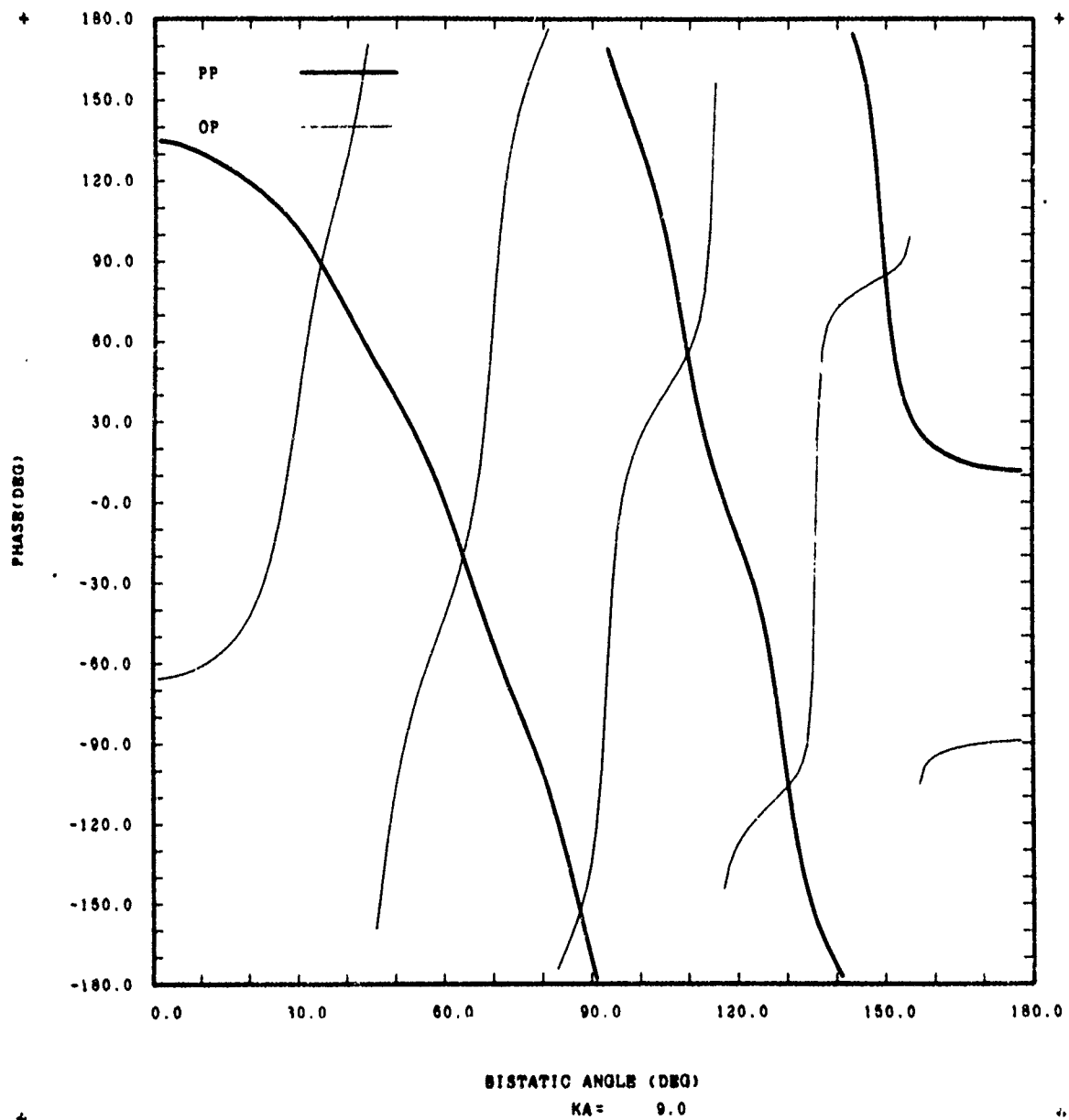


Fig. 18. Phase vs. bistatic angle.

TN-1976-34(19)

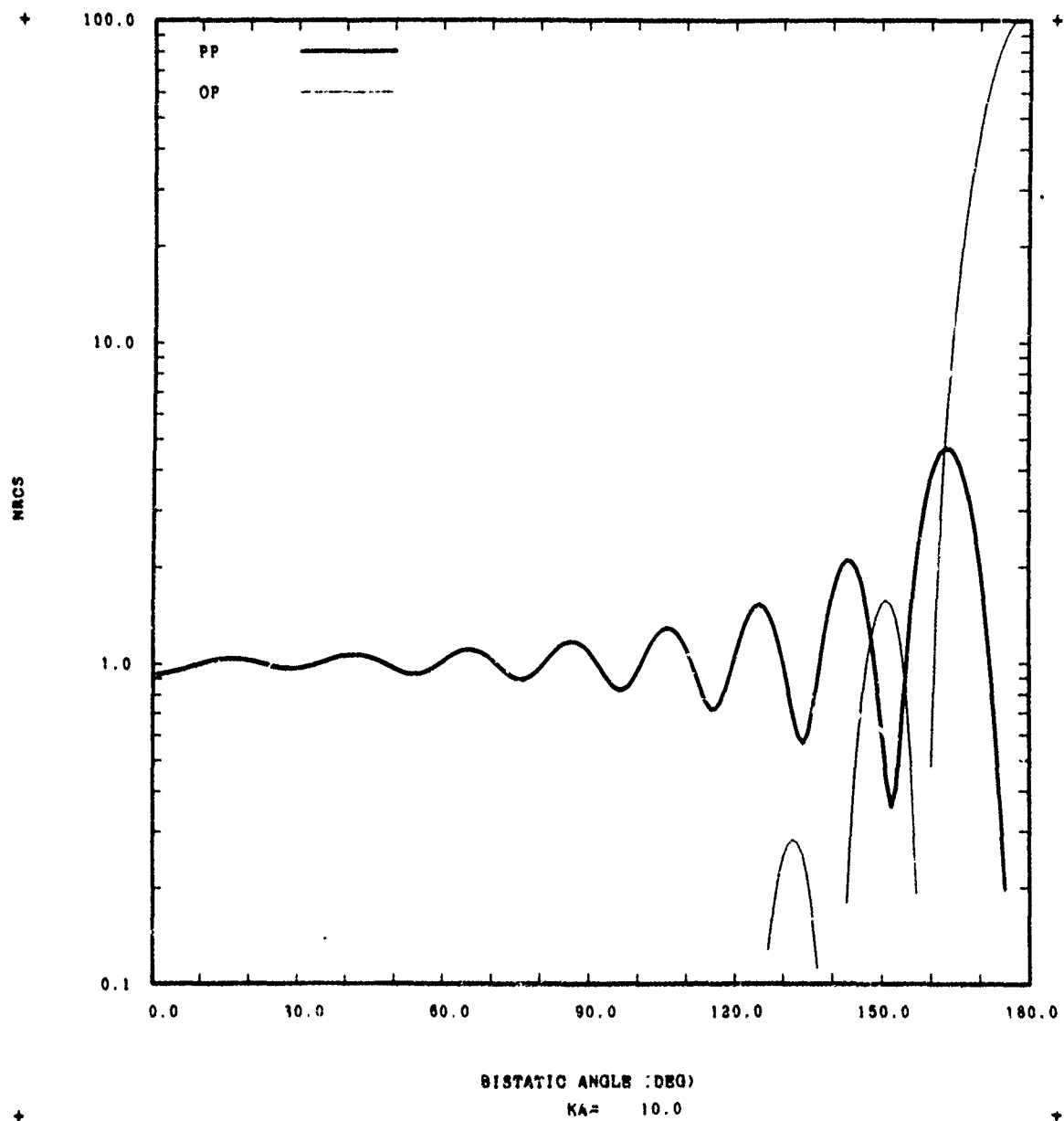


Fig. 19. Normalized radar cross-section vs. bistatic angle.

TN-1976-34(20)

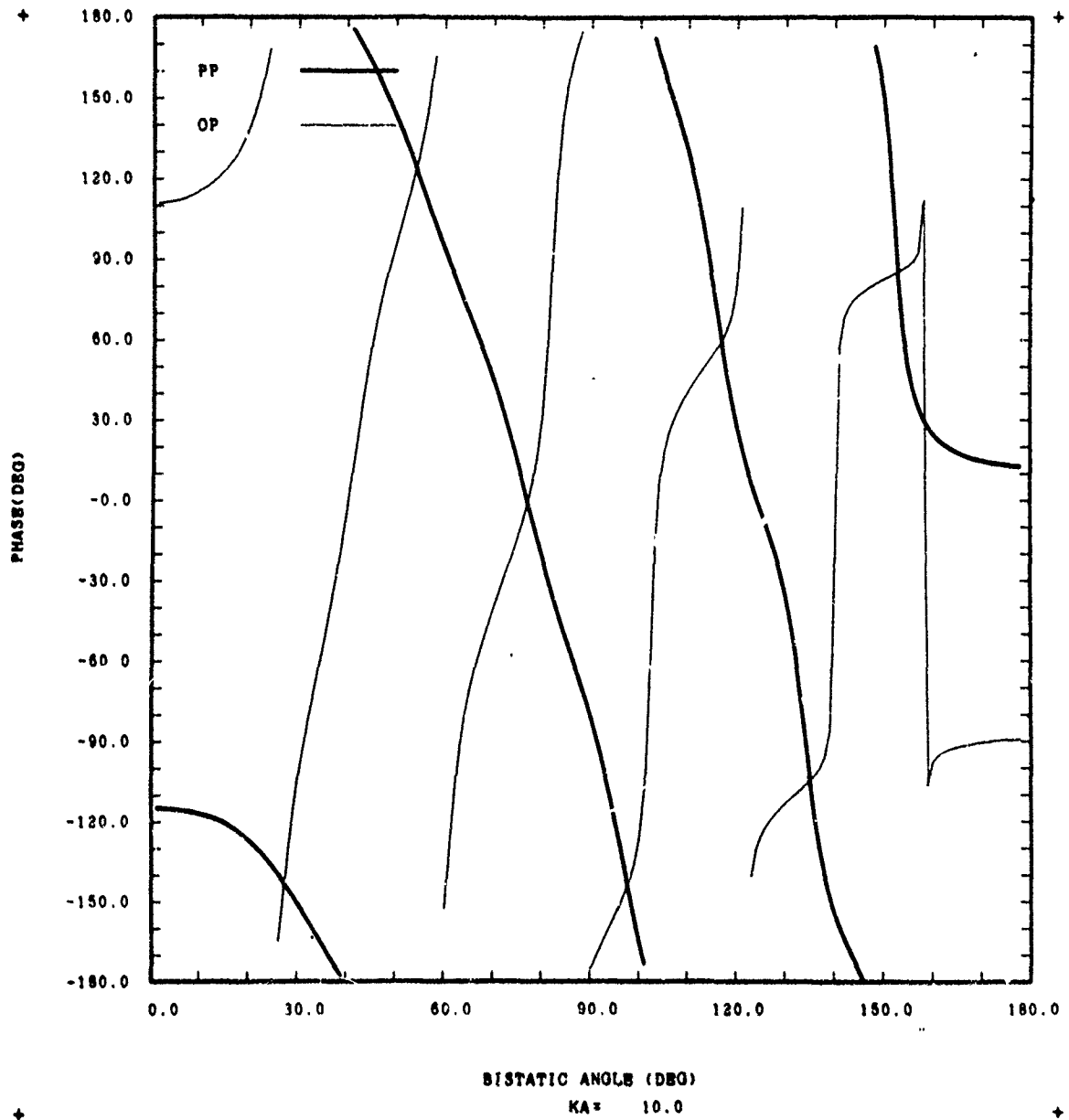


Fig. 20. Phase vs. bistatic angle.

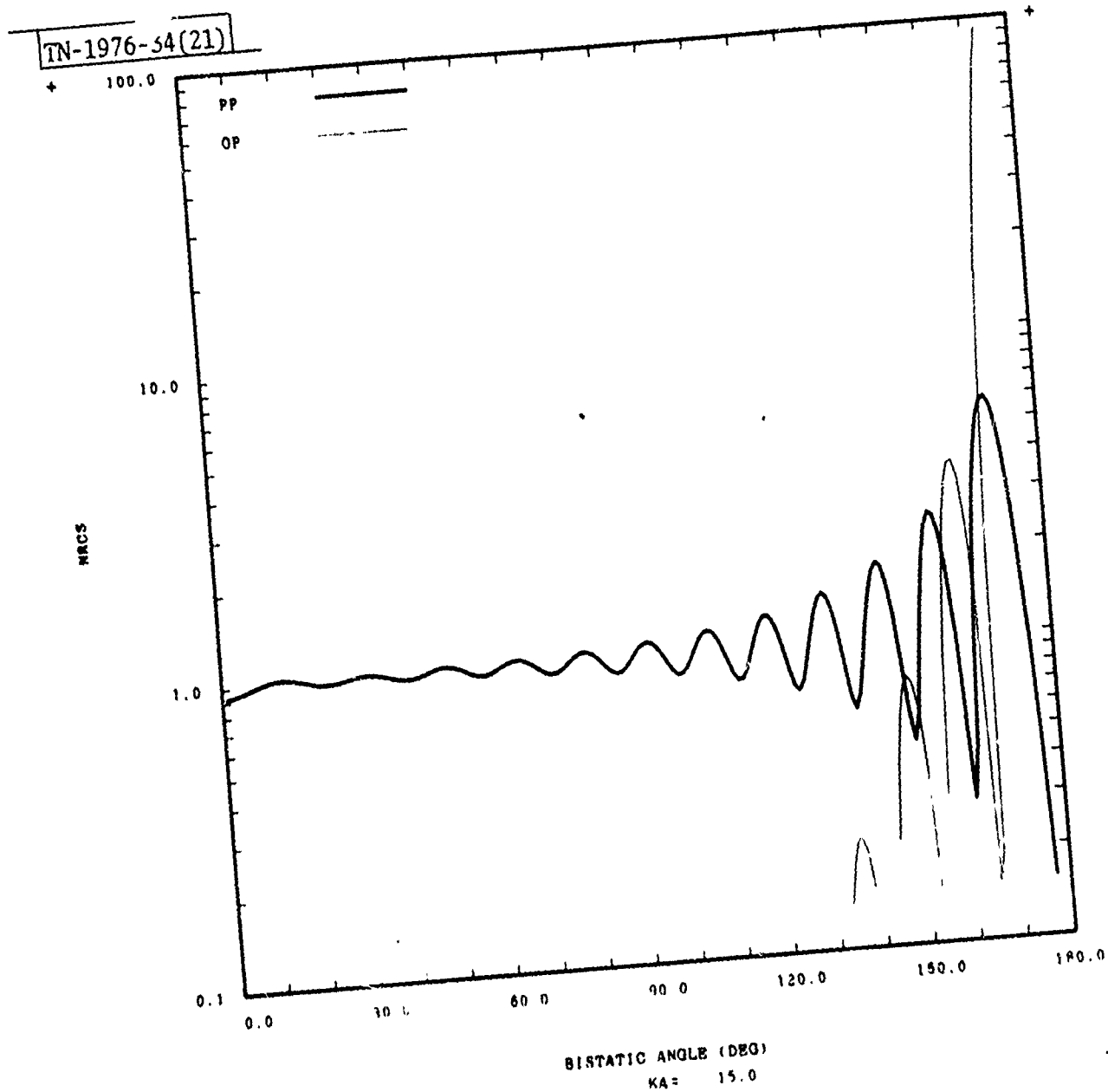


Fig. 21. Normalized radar cross-section vs. bistatic angle.

TN-1976-34(22)

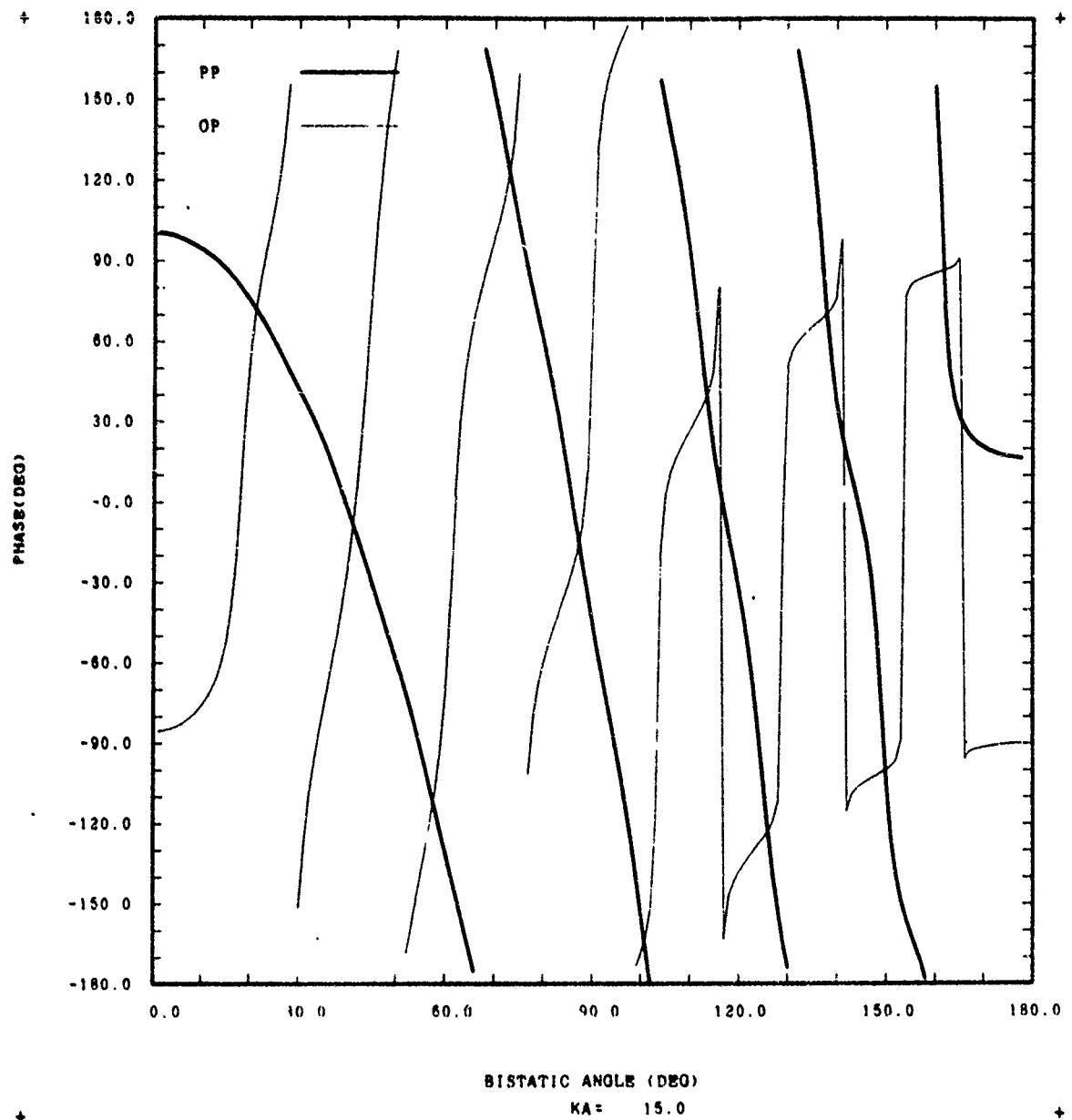


Fig. 22. Phase vs. bistatic angle.

TN-1976-34(23)

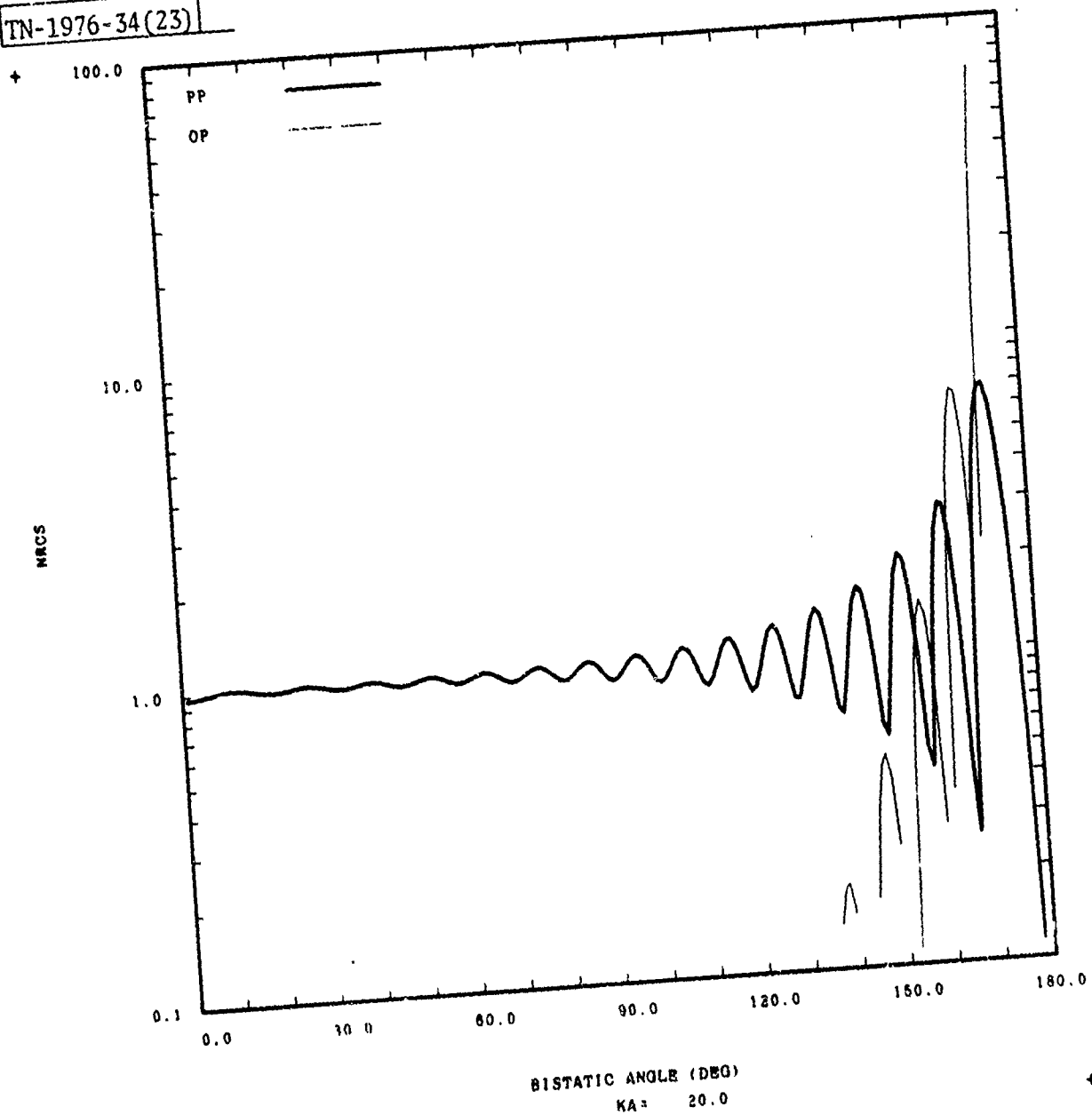


Fig. 23. Normalized radar cross-section vs. bistatic angle.

TN-1976-34(24)

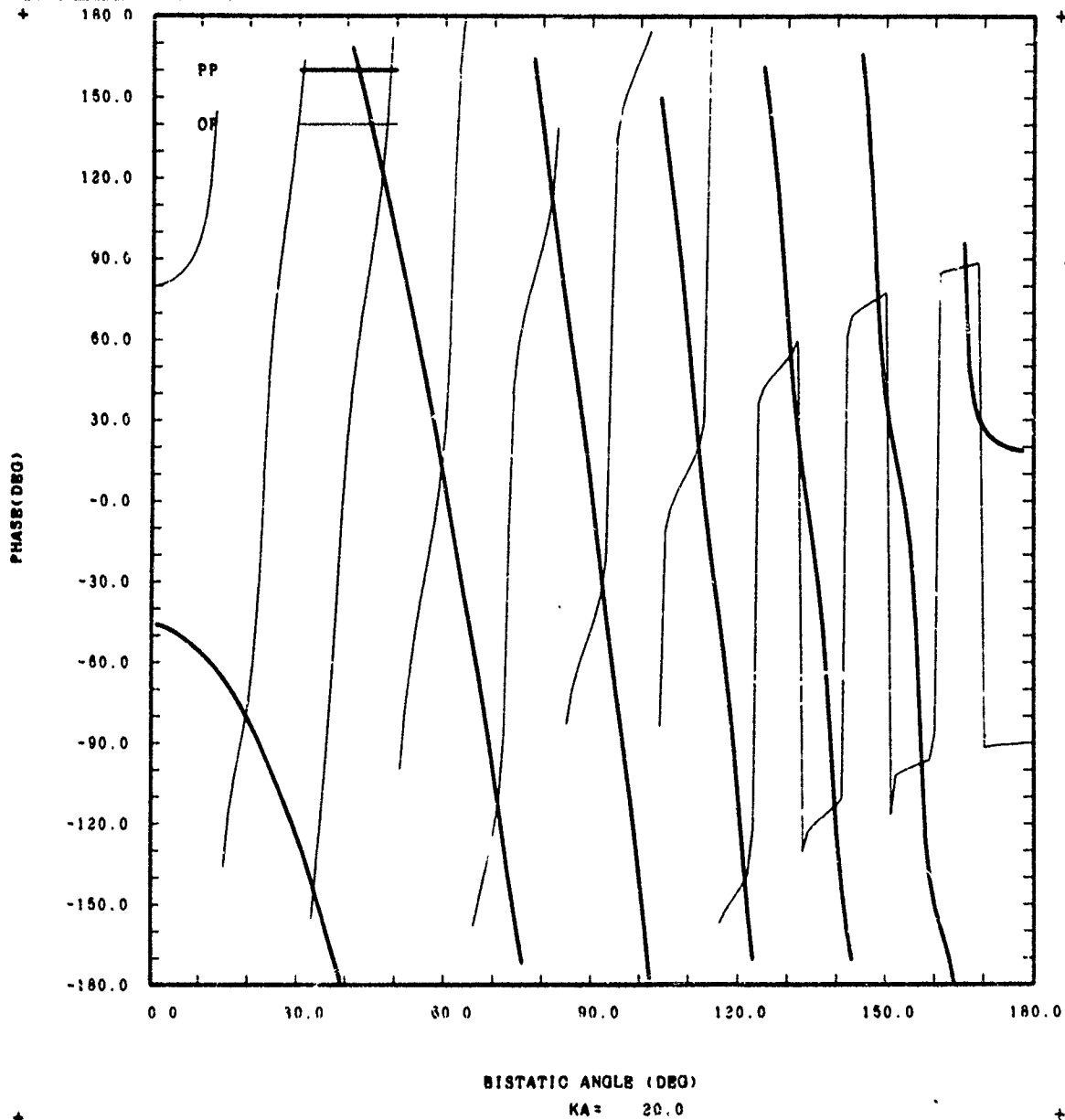


Fig. 24. Phase vs. bistatic angle.

CIRCULAR PP POLARIZATION KA= 1.000					CIRCULAR OP POLARIZATION KA= 1.000				
THETA	REAL	IMAG	PHASE	NRCS	THETA	REAL	IMAG	PHASE	NRCS
0.0	0.175926D+01	-0.736596D+00	-22.72	3.637567	0.0	-0.803801D-13	-0.698677D-13	-139.00	0.000000
1.0	0.175919D+01	-0.736540D+00	-22.72	3.637245	1.0	0.419748D-04	-0.756618D-04	-60.98	0.000000
2.0	0.175899D+01	-0.736375D+00	-22.72	3.636282	2.0	0.167906D-03	-0.302632D-03	-60.98	0.000000
3.0	0.175865D+01	-0.736099D+00	-22.71	3.634676	3.0	0.377804D-03	-0.680845D-03	-60.97	0.000001
4.0	0.175817D+01	-0.735714D+00	-22.71	3.632427	4.0	0.671686D-03	-0.121020D-02	-60.97	0.000002
5.0	0.175755D+01	-0.735218D+00	-22.70	3.629537	5.0	0.104958D-02	-0.195053D-02	-60.96	0.000005
6.0	0.175680D+01	-0.734612D+00	-22.69	3.626004	6.0	0.151151D-02	-0.272167D-02	-60.95	0.000010
7.0	0.175591D+01	-0.733897D+00	-22.68	3.621829	7.0	0.205752D-02	-0.370336D-02	-60.94	0.000018
8.0	0.175488D+01	-0.733072D+00	-22.67	3.617012	8.0	0.268765D-02	-0.483534D-02	-60.93	0.000031
9.0	0.175372D+01	-0.732138D+00	-22.66	3.611553	9.0	0.340195D-02	-0.611728D-02	-60.92	0.000049
10.0	0.175241D+01	-0.731095D+00	-22.65	3.604853	10.0	0.420048D-02	-0.754882D-02	-60.91	0.000075
11.0	0.175097D+01	-0.729843D+00	-22.63	3.598711	11.0	0.508330D-02	-0.912556D-02	-60.89	0.000109
12.0	0.174939D+01	-0.728683D+00	-22.61	3.591328	12.0	0.605487D-02	-0.108551D-01	-60.87	0.000155
13.0	0.174766D+01	-0.727314D+00	-22.60	3.583305	13.0	0.710208D-02	-0.127368D-01	-60.86	0.000213
14.0	0.174579D+01	-0.725839D+00	-22.58	3.574641	14.0	0.823819D-02	-0.147623D-01	-60.84	0.000286
15.0	0.174379D+01	-0.724256D+00	-22.55	3.565336	15.0	0.945889D-02	-0.169349D-01	-60.81	0.000376
16.0	0.174163D+01	-0.722566D+00	-22.53	3.555393	16.0	0.107643D-01	-0.192541D-01	-60.79	0.000487
17.0	0.173934D+01	-0.720770D+00	-22.51	3.544810	17.0	0.121544D-01	-0.217192D-01	-60.77	0.000619
18.0	0.173690D+01	-0.718869D+00	-22.48	3.533589	18.0	0.136294D-01	-0.243294D-01	-60.74	0.000778
19.0	0.173431D+01	-0.716862D+00	-22.46	3.521730	19.0	0.151893D-01	-0.270841D-01	-60.72	0.000964
20.0	0.173156D+01	-0.714750D+00	-22.43	3.509235	20.0	0.168342D-01	-0.299825D-01	-60.69	0.001182
21.0	0.172870D+01	-0.712535D+00	-22.40	3.496103	21.0	0.185543D-01	-0.330237D-01	-60.66	0.001435
22.0	0.172567D+01	-0.710217D+00	-22.37	3.482337	22.0	0.203796D-01	-0.362069D-01	-60.63	0.001726
23.0	0.172249D+01	-0.707795D+00	-22.34	3.467937	23.0	0.222802D-01	-0.395311D-01	-60.59	0.002059
24.0	0.171916D+01	-0.705272D+00	-22.31	3.452905	24.0	0.242662D-01	-0.429956D-01	-60.56	0.002437
25.0	0.171567D+01	-0.702648D+00	-22.27	3.437242	25.0	0.263378D-01	-0.465991D-01	-60.52	0.002865
26.0	0.171203D+01	-0.699923D+00	-22.24	3.420950	26.0	0.284949D-01	-0.503408D-01	-60.49	0.003346
27.0	0.170824D+01	-0.697098D+00	-22.20	3.404030	27.0	0.307377D-01	-0.542195D-01	-60.45	0.003885
28.0	0.170429D+01	-0.694175D+00	-22.16	3.386484	28.0	0.330662D-01	-0.582342D-01	-60.41	0.004485
29.0	0.170018D+01	-0.691154D+00	-22.12	3.368315	29.0	0.354806D-01	-0.623837D-01	-60.37	0.005151
30.0	0.169592D+01	-0.688035D+00	-22.08	3.349525	30.0	0.379809D-01	-0.666668D-01	-60.33	0.005887
31.0	0.169149D+01	-0.684820D+00	-22.04	3.330117	31.0	0.405671D-01	-0.710824D-01	-60.29	0.006693
32.0	0.168690D+01	-0.681510D+00	-22.00	3.310092	32.0	0.432393D-01	-0.756291D-01	-60.24	0.007589
33.0	0.168215D+01	-0.678106D+00	-21.96	3.289455	33.0	0.459767D-01	-0.803056D-01	-60.20	0.008565
34.0	0.167723D+01	-0.674609D+00	-21.91	3.268208	34.0	0.488420D-01	-0.851107D-01	-60.15	0.009629
35.0	0.167215D+01	-0.671019D+00	-21.87	3.246354	35.0	0.517726D-01	-0.903428D-01	-60.10	0.010788
36.0	0.166690D+01	-0.667338D+00	-21.82	3.223899	36.0	0.547892D-01	-0.951008D-01	-60.05	0.012046
37.0	0.166148D+01	-0.663567D+00	-21.77	3.200845	37.0	0.578921D-01	-0.100283D+00	-60.00	0.013408
38.0	0.165589D+01	-0.659706D+00	-21.72	3.177197	38.0	0.610410D-01	-0.105588D+00	-59.95	0.014880
39.0	0.165013D+01	-0.655758D+00	-21.67	3.152960	39.0	0.643356D-01	-0.110144D+00	-59.90	0.016466
40.0	0.164420D+01	-0.651723D+00	-21.62	3.128139	40.0	0.677172D-01	-0.116560D+00	-59.84	0.018172
41.0	0.163809D+01	-0.647602D+00	-21.57	3.102738	41.0	0.711443D-01	-0.122224D+00	-59.79	0.020003
42.0	0.163181D+01	-0.643397D+00	-21.52	3.076765	42.0	0.746973D-01	-0.128005D+00	-59.73	0.021965
43.0	0.162535D+01	-0.639109D+00	-21.47	3.050224	43.0	0.783162D-01	-0.133900D+00	-59.68	0.024063
44.0	0.161871D+01	-0.634739D+00	-21.41	3.023122	44.0	0.820208D-01	-0.139909D+00	-59.62	0.026302
45.0	0.161189D+01	-0.630288D+00	-21.36	2.994466	45.0	0.858110D-01	-0.146029D+00	-59.56	0.028688

CIRCULAR PP POLARIZATION KA= 1.000					CIRCULAR OP POLARIZATION KA= 1.000				
THETA	REAL	IMAG	PHASE	MPCS	THETA	REAL	IMAG	PHASE	MPCS
45.0	0.161189D+01	-0.630288D+00	-21.36	2.995466	45.0	0.858110D+01	-0.146029D+00	-59.56	0.028688
46.0	0.160490D+01	-0.625758D+00	-21.30	2.967263	46.0	0.896867D+01	-0.152258D+00	-59.50	0.031226
47.0	0.159772D+01	-0.621150D+00	-21.24	2.938521	47.0	0.936476D+01	-0.158595D+00	-59.44	0.033922
48.0	0.159035D+01	-0.616465D+00	-21.19	2.909247	48.0	0.976235D+01	-0.165039D+00	-59.38	0.036782
49.0	0.158280D+01	-0.611705D+00	-21.13	2.879450	49.0	0.101824D+00	-0.171586D+00	-59.31	0.039810
50.0	0.157507D+01	-0.606871D+00	-21.07	2.849139	50.0	0.106040D+00	-0.178236D+00	-59.25	0.043012
51.0	0.156715D+01	-0.601965D+00	-21.01	2.818324	51.0	0.110339D+00	-0.184986D+00	-59.19	0.046394
52.0	0.155904D+01	-0.596987D+00	-20.95	2.787013	52.0	0.114723D+00	-0.191834D+00	-59.12	0.049962
53.0	0.155075D+01	-0.591941D+00	-20.89	2.755217	53.0	0.119190D+00	-0.198779D+00	-59.05	0.053719
54.0	0.154227D+01	-0.586826D+00	-20.83	2.722946	54.0	0.123741D+00	-0.205818D+00	-58.99	0.057673
55.0	0.153359D+01	-0.581644D+00	-20.77	2.690213	55.0	0.128374D+00	-0.212949D+00	-58.92	0.061627
56.0	0.152473D+01	-0.576398D+00	-20.71	2.657028	56.0	0.133090D+00	-0.220779D+00	-58.85	0.066188
57.0	0.151567D+01	-0.571088D+00	-20.65	2.623403	57.0	0.137867D+00	-0.227480D+00	-58.78	0.070760
58.0	0.150643D+01	-0.565716D+00	-20.58	2.589352	58.0	0.142767D+00	-0.234875D+00	-58.71	0.075549
59.0	0.149699D+01	-0.560284D+00	-20.52	2.554886	59.0	0.147727D+00	-0.242354D+00	-58.64	0.080559
60.0	0.148735D+01	-0.554794D+00	-20.46	2.520021	60.0	0.152767D+00	-0.249915D+00	-58.56	0.085795
61.0	0.147753D+01	-0.549246D+00	-20.39	2.484764	61.0	0.157888D+00	-0.257555D+00	-58.49	0.091263
62.0	0.146751D+01	-0.543643D+00	-20.33	2.449145	62.0	0.163087D+00	-0.265272D+00	-58.42	0.096967
63.0	0.145730D+01	-0.537986D+00	-20.26	2.413165	63.0	0.168365D+00	-0.273065D+00	-58.34	0.102911
64.0	0.144690D+01	-0.532277D+00	-20.20	2.376843	64.0	0.173720D+00	-0.280977D+00	-58.27	0.109100
65.0	0.143631D+01	-0.526518D+00	-20.13	2.340196	65.0	0.179153D+00	-0.288777D+00	-58.19	0.115538
66.0	0.142552D+01	-0.520710D+00	-20.07	2.303241	66.0	0.184661D+00	-0.296867D+00	-58.12	0.122230
67.0	0.141454D+01	-0.514855D+00	-20.00	2.265994	67.0	0.190245D+00	-0.304935D+00	-58.04	0.129179
68.0	0.140337D+01	-0.508955D+00	-19.93	2.228472	68.0	0.195903D+00	-0.313067D+00	-57.96	0.136389
69.0	0.139200D+01	-0.503012D+00	-19.87	2.190694	69.0	0.201635D+00	-0.321259D+00	-57.89	0.143864
70.0	0.138045D+01	-0.497027D+00	-19.80	2.152679	70.0	0.207435D+00	-0.329510D+00	-57.81	0.151607
71.0	0.136871D+01	-0.491002D+00	-19.73	2.114444	71.0	0.213314D+00	-0.337816D+00	-57.73	0.159623
72.0	0.135678D+01	-0.484939D+00	-19.67	2.076009	72.0	0.219260D+00	-0.346176D+00	-57.65	0.167913
73.0	0.134466D+01	-0.478840D+00	-19.60	2.037393	73.0	0.225275D+00	-0.354587D+00	-57.57	0.176480
74.0	0.133235D+01	-0.472707D+00	-19.53	1.998618	74.0	0.231358D+00	-0.363046D+00	-57.49	0.185329
75.0	0.131986D+01	-0.466541D+00	-19.47	1.959702	75.0	0.237508D+00	-0.371551D+00	-57.41	0.194460
76.0	0.130719D+01	-0.460344D+00	-19.40	1.920668	76.0	0.243723D+00	-0.380099D+00	-57.33	0.203876
77.0	0.129434D+01	-0.454119D+00	-19.33	1.881535	77.0	0.250003D+00	-0.388688D+00	-57.25	0.213580
78.0	0.128130D+01	-0.447866D+00	-19.27	1.842326	78.0	0.256345D+00	-0.397316D+00	-57.17	0.223572
79.0	0.126809D+01	-0.441589D+00	-19.20	1.803063	79.0	0.262749D+00	-0.405978D+00	-57.09	0.233856
80.0	0.125471D+01	-0.435288D+00	-19.13	1.763766	80.0	0.269213D+00	-0.414674D+00	-57.01	0.244431
81.0	0.124115D+01	-0.428966D+00	-19.07	1.724460	81.0	0.275736D+00	-0.423401D+00	-56.93	0.255298
82.0	0.122742D+01	-0.422625D+00	-19.00	1.685166	82.0	0.282315D+00	-0.432153D+00	-56.84	0.266460
83.0	0.121352D+01	-0.416266D+00	-18.93	1.645907	83.0	0.288950D+00	-0.440933D+00	-56.76	0.277915
84.0	0.119946D+01	-0.409892D+00	-18.87	1.606706	84.0	0.295638D+00	-0.449736D+00	-56.68	0.289664
85.0	0.118523D+01	-0.403504D+00	-18.80	1.567586	85.0	0.302378D+00	-0.458558D+00	-56.60	0.301708
86.0	0.117085D+01	-0.397105D+00	-18.73	1.528571	86.0	0.309169D+00	-0.467396D+00	-56.52	0.314045
87.0	0.115630D+01	-0.390695D+00	-18.67	1.489683	87.0	0.316007D+00	-0.476250D+00	-56.43	0.326675
88.0	0.114161D+01	-0.384278D+00	-18.60	1.450963	88.0	0.322893D+00	-0.485115D+00	-56.35	0.339596
89.0	0.112677D+01	-0.377856D+00	-18.54	1.412384	89.0	0.329823D+00	-0.493989D+00	-56.27	0.352808
90.0	0.111178D+01	-0.371429D+00	-18.47	1.374020	90.0	0.336795D+00	-0.502870D+00	-56.19	0.366309

CIRCULAR PP POLARIZATION KA= 1.000					CIRCULAR OP POLARIZATION KA= 1.000				
THETA	REAL	IMAG	PHASE	RECS	THETA	REAL	IMAG	PHASE	RECS
90.0	0.111178D+01	-0.371429D+00	-18.47	1.374020	90.0	0.336795D+00	-0.502870D+00	-56.19	0.366309
91.0	0.109665D+01	-0.365000D+00	-18.41	1.335876	91.0	0.343808D+00	-0.511754D+00	-56.11	0.380096
92.0	0.108139D+01	-0.358572D+00	-18.34	1.297977	92.0	0.350500D+00	-0.520639D+00	-56.02	0.394169
93.0	0.106599D+01	-0.352145D+00	-18.28	1.260345	93.0	0.357948D+00	-0.529523D+00	-55.94	0.408521
94.0	0.105047D+01	-0.345723D+00	-18.22	1.223008	94.0	0.365070D+00	-0.538402D+00	-55.86	0.423153
95.0	0.103482D+01	-0.339306D+00	-18.15	1.185975	95.0	0.372225D+00	-0.547274D+00	-55.78	0.438060
96.0	0.101905D+01	-0.332897D+00	-18.09	1.149283	96.0	0.379405D+00	-0.556137D+00	-55.70	0.453239
97.0	0.100317D+01	-0.326499D+00	-18.03	1.112948	97.0	0.386620D+00	-0.564966D+00	-55.62	0.468685
98.0	0.987178D+00	-0.320112D+00	-17.97	1.076992	98.0	0.393857D+00	-0.573821D+00	-55.54	0.484393
99.0	0.971085D+00	-0.313738D+00	-17.90	1.041438	99.0	0.401117D+00	-0.582637D+00	-55.45	0.500360
100.0	0.954984D+00	-0.307381D+00	-17.84	1.006306	100.0	0.408396D+00	-0.591433D+00	-55.37	0.516580
101.0	0.938611D+00	-0.301041D+00	-17.78	0.971617	101.0	0.415694D+00	-0.600205D+00	-55.29	0.533047
102.0	0.922242D+00	-0.294721D+00	-17.72	0.937391	102.0	0.423007D+00	-0.608951D+00	-55.21	0.549756
103.0	0.905793D+00	-0.288422D+00	-17.66	0.903688	103.0	0.430332D+00	-0.617668D+00	-55.13	0.566700
104.0	0.889269D+00	-0.282147D+00	-17.60	0.870407	104.0	0.437668D+00	-0.626354D+00	-55.06	0.583873
105.0	0.872678D+00	-0.275898D+00	-17.54	0.837686	105.0	0.445012D+00	-0.635005D+00	-54.98	0.601267
106.0	0.856025D+00	-0.269675D+00	-17.49	0.805503	106.0	0.452360D+00	-0.643620D+00	-54.90	0.618876
107.0	0.839317D+00	-0.263482D+00	-17.43	0.773876	107.0	0.459710D+00	-0.652195D+00	-54.82	0.636691
108.0	0.822561D+00	-0.257321D+00	-17.37	0.742821	108.0	0.467059D+00	-0.660728D+00	-54.74	0.654706
109.0	0.805764D+00	-0.251192D+00	-17.31	0.712354	109.0	0.474405D+00	-0.669216D+00	-54.67	0.672910
110.0	0.788933D+00	-0.245098D+00	-17.26	0.682489	110.0	0.481745D+00	-0.677656D+00	-54.59	0.691296
111.0	0.772075D+00	-0.239048D+00	-17.20	0.653280	111.0	0.489075D+00	-0.686046D+00	-54.52	0.709854
112.0	0.755197D+00	-0.233024D+00	-17.15	0.624622	112.0	0.496394D+00	-0.694384D+00	-54.44	0.728575
113.0	0.738306D+00	-0.227047D+00	-17.09	0.596446	113.0	0.503697D+00	-0.702664D+00	-54.37	0.747450
114.0	0.721411D+00	-0.221112D+00	-17.04	0.569324	114.0	0.510983D+00	-0.710890D+00	-54.29	0.766467
115.0	0.704518D+00	-0.215222D+00	-16.99	0.542666	115.0	0.518247D+00	-0.719053D+00	-54.22	0.785618
116.0	0.687636D+00	-0.209377D+00	-16.93	0.516683	116.0	0.525488D+00	-0.727153D+00	-54.14	0.804890
117.0	0.670773D+00	-0.203581D+00	-16.88	0.491381	117.0	0.532702D+00	-0.735184D+00	-54.06	0.824273
118.0	0.653936D+00	-0.197835D+00	-16.83	0.466770	118.0	0.539887D+00	-0.743154D+00	-54.00	0.843756
119.0	0.637133D+00	-0.192140D+00	-16.78	0.442856	119.0	0.547038D+00	-0.751050D+00	-53.93	0.863327
120.0	0.620373D+00	-0.186499D+00	-16.73	0.419644	120.0	0.554153D+00	-0.758873D+00	-53.86	0.882973
121.0	0.603664D+00	-0.180912D+00	-16.68	0.397139	121.0	0.561229D+00	-0.766619D+00	-53.79	0.902684
122.0	0.587014D+00	-0.175383D+00	-16.63	0.375445	122.0	0.568263D+00	-0.774288D+00	-53.72	0.922446
123.0	0.570432D+00	-0.169912D+00	-16.59	0.354262	123.0	0.575252D+00	-0.781877D+00	-53.66	0.942246
124.0	0.553925D+00	-0.164502D+00	-16.54	0.333898	124.0	0.582193D+00	-0.789382D+00	-53.59	0.962072
125.0	0.537503D+00	-0.159153D+00	-16.49	0.314240	125.0	0.589082D+00	-0.796802D+00	-53.52	0.981911
126.0	0.521175D+00	-0.153868D+00	-16.45	0.295299	126.0	0.595916D+00	-0.804134D+00	-53.46	1.001748
127.0	0.504948D+00	-0.148698D+00	-16.40	0.277069	127.0	0.602693D+00	-0.811377D+00	-53.39	1.021571
128.0	0.488831D+00	-0.143477D+00	-16.36	0.259547	128.0	0.609409D+00	-0.818527D+00	-53.33	1.041366
129.0	0.472834D+00	-0.138413D+00	-16.32	0.242730	129.0	0.616061D+00	-0.825583D+00	-53.27	1.061118
130.0	0.456954D+00	-0.133459D+00	-16.27	0.226612	130.0	0.622646D+00	-0.832541D+00	-53.21	1.080813
131.0	0.441231D+00	-0.128457D+00	-16.23	0.211184	131.0	0.629161D+00	-0.839403D+00	-53.15	1.100438
132.0	0.425643D+00	-0.123509D+00	-16.19	0.196446	132.0	0.635603D+00	-0.846160D+00	-53.09	1.119978
133.0	0.410209D+00	-0.118795D+00	-16.15	0.182384	133.0	0.641969D+00	-0.852815D+00	-53.03	1.139417
134.0	0.394937D+00	-0.114078D+00	-16.11	0.168989	134.0	0.648255D+00	-0.859365D+00	-52.97	1.158743
135.0	0.379837D+00	-0.109439D+00	-16.07	0.156253	135.0	0.654459D+00	-0.865807D+00	-52.91	1.177939

CIRCULAR PP POLARIZATION KA= 1.000					CIRCULAR O POLARIZATION KA= 1.000				
THETA	REAL	IMAG	PHASE	MBCS	THETA	REAL	IMAG	PHASE	MBCS
135.0	0.79837D+00	-0.109439D+00	-16.07	0.156253	135.0	0.654459D+00	-0.865807D+00	-52.91	1.177939
136.0	0.36497D+00	-0.104879D+00	-16.03	0.144164	136.0	0.560578D+00	-0.872140D+00	-52.86	1.196991
137.0	0.350185D+00	-0.100399D+00	-16.00	0.132710	137.0	0.666608D+00	-0.878361D+00	-52.80	1.215884
138.0	0.335651D+00	-0.960023D-01	-15.96	0.121878	138.0	0.672547D+00	-0.884468D+00	-52.75	1.234604
139.0	0.321322D+00	-0.916888D-01	-15.93	0.111655	139.0	0.678392D+00	-0.890460D+00	-52.70	1.253135
140.0	0.307208D+00	-0.874601D-01	-15.89	0.102026	140.0	0.684140D+00	-0.896334D+00	-52.65	1.271462
141.0	0.293316D+00	-0.833178D-01	-15.86	0.092976	141.0	0.689787D+00	-0.902089D+00	-52.60	1.289571
142.0	0.279636D+00	-0.792631D-01	-15.82	0.084490	142.0	0.695332D+00	-0.907723D+00	-52.55	1.307447
143.0	0.266235D+00	-0.752972D-01	-15.79	0.076551	143.0	0.700771D+00	-0.913233D+00	-52.50	1.325075
144.0	0.253061D+00	-0.714214D-01	-15.76	0.069141	144.0	0.706102D+00	-0.918619D+00	-52.45	1.342440
145.0	0.240142D+00	-0.676370D-01	-15.73	0.062243	145.0	0.711321D+00	-0.923878D+00	-52.41	1.359528
146.0	0.227488D+00	-0.639451D-01	-15.70	0.055880	146.0	0.716427D+00	-0.929009D+00	-52.36	1.376325
147.0	0.215104D+00	-0.603463D-01	-15.67	0.049912	147.0	0.721416D+00	-0.934010D+00	-52.32	1.392815
148.0	0.203000D+00	-0.568437D-01	-15.64	0.044440	148.0	0.726286D+00	-0.938879D+00	-52.28	1.408985
149.0	0.191182D+00	-0.534364D-01	-15.62	0.039406	149.0	0.731034D+00	-0.943615D+00	-52.23	1.424821
150.0	0.179659D+00	-0.501261D-01	-15.59	0.034790	150.0	0.735658D+00	-0.948217D+00	-52.19	1.440309
151.0	0.168437D+00	-0.469140D-01	-15.56	0.030572	151.0	0.740156D+00	-0.952683D+00	-52.16	1.455435
152.0	0.157523D+00	-0.438003D-01	-15.54	0.026132	152.0	0.744525D+00	-0.957011D+00	-52.12	1.470186
153.0	0.146925D+00	-0.407881D-01	-15.52	0.022511	153.0	0.748762D+00	-0.961200D+00	-52.08	1.484549
154.0	0.136650D+00	-0.378763D-01	-15.49	0.020108	154.0	0.752866D+00	-0.965248D+00	-52.05	1.498511
155.0	0.126703D+00	-0.350664D-01	-15.47	0.017729	155.0	0.756834D+00	-0.969155D+00	-52.01	1.512060
156.0	0.117092D+00	-0.323596D-01	-15.45	0.014758	156.0	0.760650D+00	-0.972919D+00	-51.98	1.525183
157.0	0.107823D+00	-0.297564D-01	-15.43	0.012511	157.0	0.764355D+00	-0.976539D+00	-51.95	1.537868
158.0	0.989018D-01	-0.271579D-01	-15.41	0.010525	158.0	0.767904D+00	-0.980014D+00	-51.92	1.550184
159.0	0.903339D-01	-0.248664D-01	-15.39	0.008778	159.0	0.771309D+00	-0.983343D+00	-51.89	1.561880
160.0	0.821256D-01	-0.225777D-01	-15.37	0.007254	160.0	0.774568D+00	-0.986523D+00	-51.86	1.573184
161.0	0.742820D-01	-0.203976D-01	-15.35	0.005934	161.0	0.777680D+00	-0.989556D+00	-51.84	1.584006
162.0	0.668083D-01	-0.183251D-01	-15.34	0.004799	162.0	0.780643D+00	-0.992438D+00	-51.81	1.594337
163.0	0.597096D-01	-0.163608D-01	-15.32	0.003833	163.0	0.783455D+00	-0.995171D+00	-51.79	1.604166
164.0	0.529904D-01	-0.145054D-01	-15.31	0.003018	164.0	0.786114D+00	-0.997752D+00	-51.77	1.613484
165.0	0.466557D-01	-0.127594D-01	-15.30	0.002340	165.0	0.788620D+00	-0.100018D+01	-51.74	1.622283
166.0	0.407092D-01	-0.111235D-01	-15.28	0.001781	166.0	0.790971D+00	-0.100246D+01	-51.73	1.630534
167.0	0.351551D-01	-0.959807D-02	-15.27	0.001328	167.0	0.793166D+00	-0.100458D+01	-51.71	1.638289
168.0	0.299972D-01	-0.818369D-02	-15.26	0.000967	168.0	0.795202D+00	-0.100655D+01	-51.69	1.645482
169.0	0.252390D-01	-0.688079D-02	-15.25	0.000684	169.0	0.797081D+00	-0.100835D+01	-51.67	1.652124
170.0	0.208836D-01	-0.568779D-02	-15.24	0.000468	170.0	0.798799D+00	-0.101002D+01	-51.66	1.658211
171.0	0.169340D-01	-0.461107D-02	-15.23	0.000308	171.0	0.800356D+00	-0.101152D+01	-51.65	1.663736
172.0	0.133929D-01	-0.364496D-02	-15.22	0.000193	172.0	0.801752D+00	-0.101286D+01	-51.64	1.668693
173.0	0.102627D-01	-0.279179D-02	-15.22	0.000113	173.0	0.802986D+00	-0.101405D+01	-51.63	1.673079
174.0	0.754552D-02	-0.205182D-02	-15.21	0.000061	174.0	0.804056D+00	-0.101508D+01	-51.62	1.676883
175.0	0.524323D-02	-0.142530D-02	-15.21	0.000030	175.0	0.804963D+00	-0.101595D+01	-51.61	1.680118
176.0	0.335739D-02	-0.912408D-03	-15.20	0.000012	176.0	0.805706D+00	-0.101665D+01	-51.60	1.682765
177.0	0.188928D-02	-0.513325D-03	-15.20	0.000004	177.0	0.806284D+00	-0.101722D+01	-51.60	1.684826
178.0	0.839920D-03	-0.228175D-03	-15.20	0.000001	178.0	0.806697D+00	-0.101761D+01	-51.59	1.686299
179.0	0.210016D-03	-0.570483D-04	-15.20	0.000000	179.0	0.806945D+00	-0.101785D+01	-51.59	1.687184
180.0	0.946984D-12	0.434319D-12	24.59	0.000000	180.0	0.807027D+00	-0.101793D+01	-51.59	1.687479

CIRCULAR PP POLARIZATION KA= 2.000					CIRCULAR OP POLARIZATION KA= 2.000				
THETA	REAL	IMAG	PHASE	MSCS	THETA	REAL	IMAG	PHASE	MSCS
45.0	0.544761D+00	0.608361D+00	48.16	0.666867	45.0	-0.130824D+00	0.987510D-01	142.95	0.026867
46.0	0.566765D+00	0.593293D+00	46.31	0.673219	46.0	-0.135953D+00	0.100222D+00	143.66	0.028488
47.0	0.589067D+00	0.578116D+00	44.46	0.681219	47.0	-0.141188D+00	0.101065D+00	144.39	0.030128
48.0	0.611651D+00	0.562885D+00	42.62	0.690911	48.0	-0.146313D+00	0.101868D+00	145.15	0.031784
49.0	0.634499D+00	0.547490D+00	40.79	0.702334	49.0	-0.151513D+00	0.102671D+00	145.95	0.033451
50.0	0.657595D+00	0.532064D+00	38.98	0.715524	50.0	-0.156765D+00	0.103498D+00	146.77	0.035122
51.0	0.680921D+00	0.516579D+00	37.19	0.730508	51.0	-0.162010D+00	0.104350D+00	147.63	0.036794
52.0	0.704458D+00	0.501048D+00	35.42	0.747311	52.0	-0.167258D+00	0.105222D+00	148.52	0.038462
53.0	0.728187D+00	0.485484D+00	33.69	0.765951	53.0	-0.172502D+00	0.106106D+00	149.45	0.040122
54.0	0.752088D+00	0.469893D+00	32.00	0.786441	54.0	-0.177750D+00	0.107000D+00	150.42	0.041768
55.0	0.776141D+00	0.454310D+00	30.34	0.808786	55.0	-0.182949D+00	0.107904D+00	151.43	0.043398
56.0	0.800324D+00	0.438711D+00	28.73	0.832985	56.0	-0.188137D+00	0.108818D+00	152.47	0.045000
57.0	0.824615D+00	0.423135D+00	27.16	0.859033	57.0	-0.193290D+00	0.109742D+00	153.57	0.046595
58.0	0.848992D+00	0.407565D+00	25.64	0.886914	58.0	-0.198401D+00	0.110676D+00	154.70	0.048177
59.0	0.873433D+00	0.392077D+00	24.17	0.916608	59.0	-0.203462D+00	0.111620D+00	155.89	0.049691
60.0	0.897912D+00	0.376619D+00	22.76	0.948098	60.0	-0.208464D+00	0.112574D+00	157.12	0.051198
61.0	0.922406D+00	0.361225D+00	21.39	0.981316	61.0	-0.213398D+00	0.113538D+00	158.40	0.052677
62.0	0.946900D+00	0.345906D+00	20.07	1.016252	62.0	-0.218256D+00	0.114512D+00	159.74	0.054129
63.0	0.971339D+00	0.330673D+00	18.80	1.052848	63.0	-0.223030D+00	0.115496D+00	161.13	0.05557
64.0	0.995726D+00	0.315539D+00	17.58	1.091035	64.0	-0.227740D+00	0.116489D+00	162.57	0.056962
65.0	0.102002D+01	0.300514D+00	16.42	1.130759	65.0	-0.232288D+00	0.117491D+00	164.08	0.058349
66.0	0.104421D+01	0.285610D+00	15.30	1.171943	66.0	-0.236753D+00	0.118502D+00	165.64	0.059725
67.0	0.106825D+01	0.270837D+00	14.23	1.214507	67.0	-0.241139D+00	0.119522D+00	167.27	0.061096
68.0	0.109212D+01	0.256206D+00	13.20	1.258364	68.0	-0.245331D+00	0.120553D+00	168.96	0.062470
69.0	0.111579D+01	0.241728D+00	12.22	1.303416	69.0	-0.249388D+00	0.121594D+00	170.71	0.063858
70.0	0.113922D+01	0.227413D+00	11.29	1.349563	70.0	-0.253314D+00	0.122646D+00	172.53	0.065272
71.0	0.116242D+01	0.213270D+00	10.40	1.396694	71.0	-0.257082D+00	0.123708D+00	174.41	0.066724
72.0	0.118531D+01	0.199311D+00	9.55	1.444693	72.0	-0.260683D+00	0.124780D+00	176.36	0.068230
73.0	0.120789D+01	0.185544D+00	8.73	1.493436	73.0	-0.264166D+00	0.125862D+00	178.37	0.069808
74.0	0.123013D+01	0.171979D+00	7.96	1.542795	74.0	-0.267383D+00	0.126953D+00	179.55	0.071476
75.0	0.125199D+01	0.158625D+00	7.22	1.592633	75.0	-0.270384D+00	0.128053D+00	177.41	0.073256
76.0	0.127344D+01	0.145490D+00	6.52	1.642809	76.0	-0.273219D+00	0.129162D+00	175.22	0.075171
77.0	0.129445D+01	0.132563D+00	5.85	1.693177	77.0	-0.275841D+00	0.130280D+00	173.97	0.077246
78.0	0.131499D+01	0.119813D+00	5.21	1.743585	78.0	-0.278238D+00	0.131407D+00	170.66	0.079508
79.0	0.133504D+01	0.107487D+00	4.60	1.793878	79.0	-0.280403D+00	0.132542D+00	168.32	0.081988
80.0	0.135455D+01	0.953123D-01	4.02	1.843896	80.0	-0.282326D+00	0.133685D+00	165.93	0.084718
81.0	0.137351D+01	0.833969D-01	3.47	1.893477	81.0	-0.283999D+00	0.134836D+00	163.50	0.087730
82.0	0.139187D+01	0.717470D-01	2.95	1.942444	82.0	-0.285412D+00	0.135994D+00	161.05	0.091063
83.0	0.140962D+01	0.603704D-01	2.45	1.990661	83.0	-0.286568D+00	0.137160D+00	158.58	0.094754
84.0	0.142671D+01	0.492722D-01	1.98	2.037927	84.0	-0.287394D+00	0.138334D+00	156.10	0.098844
85.0	0.144312D+01	0.384586D-01	1.53	2.084084	85.0	-0.288017D+00	0.139515D+00	153.61	0.103376
86.0	0.145883D+01	0.279353D-01	1.10	2.128960	86.0	-0.288307D+00	0.140702D+00	151.13	0.108396
87.0	0.147380D+01	0.177074D-01	0.69	2.172387	87.0	-0.288301D+00	0.141896D+00	148.66	0.113951
88.0	0.148800D+01	0.777960D-02	0.30	2.214155	88.0	-0.287988D+00	0.143096D+00	146.21	0.120091
89.0	0.150141D+01	-0.146314D-02	-0.07	2.254221	89.0	-0.287351D+00	0.144302D+00	143.78	0.126866
90.0	0.151399D+01	-0.111573D-01	-0.42	2.292360	90.0	-0.286414D+00	0.145514D+00	141.39	0.134325

CIRCULAR PP POLARIZATION				CIRCULAR OP POLARIZATION				K2= 2.000			
THETA	REAL	IMAG	PHASE	THETA	REAL	IMAG	PHASE	THETA	REAL	IMAG	PHASE
90.0	0.151399D+01	-0.111573D-01	-0.42	90.0	-0.265414D+00	-0.228684D+00	-141.39	90.0	-0.265414D+00	-0.228684D+00	-141.39
91.0	0.152573D+01	-0.201590D-01	-0.76	91.0	-0.265180D+00	-0.247452D+00	-139.05	91.0	-0.265180D+00	-0.247452D+00	-139.05
92.0	0.153660D+01	-0.288448D-01	-1.08	92.0	-0.263533D+00	-0.266748D+00	-136.75	92.0	-0.263533D+00	-0.266748D+00	-136.75
93.0	0.154658D+01	-0.374119D-01	-1.38	93.0	-0.261587D+00	-0.286569D+00	-134.50	93.0	-0.261587D+00	-0.286569D+00	-134.50
94.0	0.155563D+01	-0.452577D-01	-1.67	94.0	-0.259292D+00	-0.306708D+00	-132.30	94.0	-0.259292D+00	-0.306708D+00	-132.30
95.0	0.156374D+01	-0.529800D-01	-1.94	95.0	-0.256660D+00	-0.327758D+00	-130.17	95.0	-0.256660D+00	-0.327758D+00	-130.17
96.0	0.157088D+01	-0.603770D-01	-2.20	96.0	-0.253659D+00	-0.349112D+00	-128.09	96.0	-0.253659D+00	-0.349112D+00	-128.09
97.0	0.157704D+01	-0.674747D-01	-2.45	97.0	-0.250320D+00	-0.370963D+00	-126.08	97.0	-0.250320D+00	-0.370963D+00	-126.08
98.0	0.158220D+01	-0.741501D-01	-2.68	98.0	-0.246612D+00	-0.393302D+00	-124.13	98.0	-0.246612D+00	-0.393302D+00	-124.13
99.0	0.158633D+01	-0.805046D-01	-2.91	99.0	-0.242539D+00	-0.416120D+00	-122.25	99.0	-0.242539D+00	-0.416120D+00	-122.25
100.0	0.158942D+01	-0.865906D-01	-3.12	100.0	-0.238101D+00	-0.439407D+00	-120.43	100.0	-0.238101D+00	-0.439407D+00	-120.43
101.0	0.159146D+01	-0.924882D-01	-3.32	101.0	-0.233295D+00	-0.463153D+00	-118.67	101.0	-0.233295D+00	-0.463153D+00	-118.67
102.0	0.159243D+01	-0.978781D-01	-3.52	102.0	-0.228119D+00	-0.487347D+00	-116.98	102.0	-0.228119D+00	-0.487347D+00	-116.98
103.0	0.159232D+01	-0.102981D+00	-3.70	103.0	-0.224257D+00	-0.511978D+00	-115.35	103.0	-0.224257D+00	-0.511978D+00	-115.35
104.0	0.159111D+01	-0.107759D+00	-3.87	104.0	-0.220566D+00	-0.537032D+00	-113.78	104.0	-0.220566D+00	-0.537032D+00	-113.78
105.0	0.158860D+01	-0.112213D+00	-4.04	105.0	-0.216036D+00	-0.562497D+00	-112.27	105.0	-0.216036D+00	-0.562497D+00	-112.27
106.0	0.158538D+01	-0.116345D+00	-4.20	106.0	-0.211712D+00	-0.588360D+00	-110.82	106.0	-0.211712D+00	-0.588360D+00	-110.82
107.0	0.158065D+01	-0.120157D+00	-4.35	107.0	-0.206866D+00	-0.614507D+00	-109.42	107.0	-0.206866D+00	-0.614507D+00	-109.42
108.0	0.157575D+01	-0.123654D+00	-4.49	108.0	-0.201599D+00	-0.641223D+00	-108.08	108.0	-0.201599D+00	-0.641223D+00	-108.08
109.0	0.156941D+01	-0.126837D+00	-4.62	109.0	-0.195748D+00	-0.668192D+00	-106.78	109.0	-0.195748D+00	-0.668192D+00	-106.78
110.0	0.156051D+01	-0.129710D+00	-4.75	110.0	-0.189423D+00	-0.695499D+00	-105.54	110.0	-0.189423D+00	-0.695499D+00	-105.54
111.0	0.155148D+01	-0.132278D+00	-4.87	111.0	-0.182495D+00	-0.723128D+00	-104.35	111.0	-0.182495D+00	-0.723128D+00	-104.35
112.0	0.154133D+01	-0.134544D+00	-4.99	112.0	-0.176125D+00	-0.751061D+00	-103.20	112.0	-0.176125D+00	-0.751061D+00	-103.20
113.0	0.153007D+01	-0.136512D+00	-5.10	113.0	-0.169953D+00	-0.779281D+00	-102.09	113.0	-0.169953D+00	-0.779281D+00	-102.09
114.0	0.151770D+01	-0.138189D+00	-5.20	114.0	-0.163480D+00	-0.807771D+00	-101.03	114.0	-0.163480D+00	-0.807771D+00	-101.03
115.0	0.150424D+01	-0.139579D+00	-5.30	115.0	-0.156759D+00	-0.836512D+00	-100.01	115.0	-0.156759D+00	-0.836512D+00	-100.01
116.0	0.148968D+01	-0.140667D+00	-5.40	116.0	-0.149716D+00	-0.865385D+00	-99.02	116.0	-0.149716D+00	-0.865385D+00	-99.02
117.0	0.147405D+01	-0.141520D+00	-5.48	117.0	-0.142919D+00	-0.894370D+00	-98.07	117.0	-0.142919D+00	-0.894370D+00	-98.07
118.0	0.145736D+01	-0.142084D+00	-5.57	118.0	-0.136111D+00	-0.923409D+00	-97.16	118.0	-0.136111D+00	-0.923409D+00	-97.16
119.0	0.143962D+01	-0.142362D+00	-5.65	119.0	-0.129499D+00	-0.953600D+00	-96.28	119.0	-0.129499D+00	-0.953600D+00	-96.28
120.0	0.142087D+01	-0.142429D+00	-5.72	120.0	-0.122457D+00	-0.983304D+00	-95.44	120.0	-0.122457D+00	-0.983304D+00	-95.44
121.0	0.140111D+01	-0.142224D+00	-5.80	121.0	-0.115055D+00	-0.101314D+01	-94.62	121.0	-0.115055D+00	-0.101314D+01	-94.62
122.0	0.138037D+01	-0.141777D+00	-5.86	122.0	-0.107459D+00	-0.104308D+01	-93.84	122.0	-0.107459D+00	-0.104308D+01	-93.84
123.0	0.135668D+01	-0.141096D+00	-5.93	123.0	-0.100721D+00	-0.107312D+01	-93.08	123.0	-0.100721D+00	-0.107312D+01	-93.08
124.0	0.133606D+01	-0.140187D+00	-5.99	124.0	-0.092522D+00	-0.110321D+01	-92.35	124.0	-0.092522D+00	-0.110321D+01	-92.35
125.0	0.131255D+01	-0.139060D+00	-6.05	125.0	-0.083254D+00	-0.113336D+01	-91.64	125.0	-0.083254D+00	-0.113336D+01	-91.64
126.0	0.128876D+01	-0.137722D+00	-6.10	126.0	-0.074167D+00	-0.116352D+01	-90.97	126.0	-0.074167D+00	-0.116352D+01	-90.97
127.0	0.126295D+01	-0.136182D+00	-6.15	127.0	-0.064738D+00	-0.119368D+01	-90.31	127.0	-0.064738D+00	-0.119368D+01	-90.31
128.0	0.123694D+01	-0.134470D+00	-6.20	128.0	-0.054626D+00	-0.122382D+01	-89.68	128.0	-0.054626D+00	-0.122382D+01	-89.68
129.0	0.121017D+01	-0.132528D+00	-6.25	129.0	-0.043801D+00	-0.125391D+01	-89.07	129.0	-0.043801D+00	-0.125391D+01	-89.07
130.0	0.118267D+01	-0.130432D+00	-6.29	130.0	-0.032363D+00	-0.128393D+01	-88.48	130.0	-0.032363D+00	-0.128393D+01	-88.48
131.0	0.115450D+01	-0.128169D+00	-6.33	131.0	-0.020964D+00	-0.131386D+01	-87.91	131.0	-0.020964D+00	-0.131386D+01	-87.91
132.0	0.112568D+01	-0.125748D+00	-6.37	132.0	-0.009363D+00	-0.134366D+01	-87.36	132.0	-0.009363D+00	-0.134366D+01	-87.36
133.0	0.109628D+01	-0.123178D+00	-6.41	133.0	0.002594D+00	-0.137333D+01	-86.83	133.0	0.002594D+00	-0.137333D+01	-86.83
134.0	0.106632D+01	-0.120469D+00	-6.45	134.0	0.009133D+00	-0.140339D+01	-86.32	134.0	0.009133D+00	-0.140339D+01	-86.32
135.0	0.103586D+01	-0.117629D+00	-6.48	135.0	0.015441D+00	-0.143321D+01	-85.83	135.0	0.015441D+00	-0.143321D+01	-85.83

CIRCULAR PP POLARIZATION KA= 2.000

THETA	REAL	IMAG	PHASE	MBCS
135.0	0.103586D+01	-0.117629D+00	-6.48	1.086833
136.0	0.100894D+01	-0.114669D+00	-6.51	1.023052
137.0	0.973619D+00	-0.111599D+00	-6.54	0.960387
138.0	0.941944D+00	-0.108426D+00	-6.57	0.898014
139.0	0.909567D+00	-0.105163D+00	-6.59	0.835095
140.0	0.877741D+00	-0.101818D+00	-6.62	0.780797
141.0	0.845321D+00	-0.984003D+01	-6.64	0.724250
142.0	0.812760D+00	-0.949205D+01	-6.66	0.665899
143.0	0.780115D+00	-0.913881D+01	-6.68	0.619332
144.0	0.747442D+00	-0.878127D+01	-6.70	0.563381
145.0	0.714796D+00	-0.842039D+01	-6.72	0.518026
146.0	0.682239D+00	-0.805712D+01	-6.74	0.471942
147.0	0.649824D+00	-0.769241D+01	-6.75	0.428188
148.0	0.617609D+00	-0.732719D+01	-6.77	0.386810
149.0	0.585654D+00	-0.696240D+01	-6.78	0.347838
150.0	0.555018D+00	-0.659933D+01	-6.79	0.311286
151.0	0.522747D+00	-0.623770D+01	-6.80	0.277156
152.0	0.491912D+00	-0.587959D+01	-6.82	0.244434
153.0	0.461563D+00	-0.552546D+01	-6.83	0.216093
154.0	0.431757D+00	-0.517617D+01	-6.84	0.189093
155.0	0.402569D+00	-0.483254D+01	-6.85	0.164381
156.0	0.373995D+00	-0.449540D+01	-6.85	0.141893
157.0	0.346146D+00	-0.416552D+01	-6.86	0.121552
158.0	0.319566D+00	-0.384369D+01	-6.87	0.103274
159.0	0.292776D+00	-0.353063D+01	-6.88	0.086964
160.0	0.267356D+00	-0.322708D+01	-6.88	0.072520
161.0	0.242843D+00	-0.293373D+01	-6.89	0.059834
162.0	0.219286D+00	-0.265123D+01	-6.89	0.048789
163.0	0.196728D+00	-0.238024D+01	-6.90	0.039269
164.0	0.175214D+00	-0.212136D+01	-6.90	0.031150
165.0	0.154785D+00	-0.187517D+01	-6.91	0.024310
166.0	0.135481D+00	-0.164222D+01	-6.91	0.018625
167.0	0.117338D+00	-0.142304D+01	-6.91	0.013971
168.0	0.100393D+00	-0.121810D+01	-6.92	0.010227
169.0	0.846784D-01	-0.102785D+01	-6.92	0.007276
170.0	0.702247D-01	-0.852728D-02	-6.92	0.005004
171.0	0.570603D-01	-0.693106D-02	-6.93	0.003204
172.0	0.452111D-01	-0.549336D-02	-6.93	0.002074
173.0	0.347004D-01	-0.421733D-02	-6.93	0.001222
174.0	0.255489D-01	-0.310577D-02	-6.93	0.000662
175.0	0.177744D-01	-0.216109D-02	-6.93	0.000321
176.0	0.113925D-01	-0.138536D-02	-6.93	0.000132
177.0	0.641569D-02	-0.780251D-03	-6.93	0.000042
178.0	0.285377D-02	-0.347092D-03	-6.93	0.000008
179.0	0.113795D-03	-0.668202D-04	-6.93	0.000001
180.0	0.694930D-11	-0.600209D-11	-40.82	0.000000

CIRCULAR DP POLARIZATION KA= 2.000

THETA	REAL	IMAG	PHASE	MBCS
135.0	0.104401D+00	-0.143214D+01	-85.83	2.061919
136.0	0.118735D+00	-0.146123D+01	-85.35	2.149302
137.0	0.133115D+00	-0.149009D+01	-84.90	2.238095
138.0	0.147525D+00	-0.151869D+01	-84.45	2.328181
139.0	0.161946D+00	-0.154700D+01	-84.02	2.419440
140.0	0.176358D+00	-0.157500D+01	-83.61	2.511743
141.0	0.190744D+00	-0.160268D+01	-83.21	2.604954
142.0	0.205083D+00	-0.162999D+01	-82.83	2.698931
143.0	0.219356D+00	-0.165693D+01	-82.46	2.793527
144.0	0.233544D+00	-0.168346D+01	-82.10	2.888589
145.0	0.247628D+00	-0.170957D+01	-81.76	2.983957
146.0	0.261588D+00	-0.173523D+01	-81.43	3.079468
147.0	0.275405D+00	-0.176043D+01	-81.11	3.174954
148.0	0.289058D+00	-0.178513D+01	-80.80	3.270241
149.0	0.302530D+00	-0.180932D+01	-80.51	3.365154
150.0	0.315800D+00	-0.183297D+01	-80.22	3.459514
151.0	0.328850D+00	-0.185607D+01	-79.95	3.553138
152.0	0.341661D+00	-0.187859D+01	-79.69	3.645843
153.0	0.354218D+00	-0.190052D+01	-79.44	3.737443
154.0	0.366490D+00	-0.192183D+01	-79.20	3.827752
155.0	0.378472D+00	-0.194251D+01	-78.97	3.916583
156.0	0.390142D+00	-0.196253D+01	-78.76	4.003749
157.0	0.401482D+00	-0.198189D+01	-78.55	4.089064
158.0	0.412476D+00	-0.200055D+01	-78.35	4.172345
159.0	0.423107D+00	-0.201851D+01	-78.16	4.253408
160.0	0.433359D+00	-0.203575D+01	-77.98	4.332076
161.0	0.44332165D+00	-0.205225D+01	-77.81	4.408170
162.0	0.452668D+00	-0.206800D+01	-77.65	4.481520
163.0	0.461687D+00	-0.208298D+01	-77.50	4.551957
164.0	0.470272D+00	-0.209718D+01	-77.36	4.619319
165.0	0.478407D+00	-0.211059D+01	-77.23	4.683449
166.0	0.486077D+00	-0.212319D+01	-77.11	4.744197
167.0	0.493272D+00	-0.213497D+01	-76.99	4.801420
168.0	0.499980D+00	-0.214593D+01	-76.88	4.854980
169.0	0.506191D+00	-0.215604D+01	-76.79	4.904750
170.0	0.511895D+00	-0.216531D+01	-76.70	4.950609
171.0	0.517083D+00	-0.217372D+01	-76.62	4.992448
172.0	0.521746D+00	-0.218127D+01	-76.55	5.030163
173.0	0.525881D+00	-0.218795D+01	-76.49	5.063663
174.0	0.529476D+00	-0.219375D+01	-76.43	5.092866
175.0	0.532527D+00	-0.219866D+01	-76.38	5.117699
176.0	0.535031D+00	-0.220269D+01	-76.35	5.138101
177.0	0.536982D+00	-0.220583D+01	-76.32	5.154023
178.0	0.538378D+00	-0.220807D+01	-76.30	5.165423
179.0	0.539216D+00	-0.220942D+01	-76.28	5.172752
180.0	0.539946D+00	-0.220987D+01	-76.28	5.174561

CIRCULAR PP POLARIZATION KA= 3.000					CIRCULAR OP POLARIZATION KA= 3.000				
THETA	REAL	IMAG	PHASE	NRCS	THETA	REAL	IMAG	PHASE	NRCS
0.0	-0.721040D+00	0.301678D-01	177.60	0.520765	0.0	-0.401623D-13	-0.300245D-12	-97.62	0.000000
1.0	-0.721188D+00	0.306128D-01	177.57	0.521049	1.0	0.105120D-03	-0.104294D-03	-44.77	0.000000
2.0	-0.721721D+00	0.319487D-01	177.57	0.521801	2.0	0.420160D-03	-0.416575D-03	-44.74	0.000000
3.0	-0.722607D+00	0.341671D-01	177.59	0.523329	3.0	0.941340D-03	-0.935022D-03	-44.69	0.000002
4.0	-0.723845D+00	0.372693D-01	177.05	0.525331	4.0	0.161100D-02	-0.165661D-02	-44.61	0.000006
5.0	-0.725432D+00	0.412470D-01	176.75	0.527953	5.0	0.261100D-02	-0.257711D-02	-44.51	0.000014
6.0	-0.727363D+00	0.460922D-01	176.37	0.531181	6.0	0.371091D-02	-0.369112D-02	-44.39	0.000028
7.0	-0.729633D+00	0.517951D-01	175.94	0.535047	7.0	0.512575D-02	-0.499208D-02	-44.24	0.000051
8.0	-0.732237D+00	0.583440D-01	175.44	0.539575	8.0	0.668444D-02	-0.647227D-02	-44.08	0.000087
9.0	-0.735167D+00	0.657259D-01	174.89	0.544791	9.0	0.844498D-02	-0.812288D-02	-43.89	0.000137
10.0	-0.738417D+00	0.739255D-01	174.28	0.550725	10.0	0.104051D-01	-0.993401D-02	-43.67	0.000207
11.0	-0.741977D+00	0.829265D-01	173.62	0.557406	11.0	0.125621D-01	-0.118947D-01	-43.44	0.000299
12.0	-0.745837D+00	0.927165D-01	172.91	0.564868	12.0	0.149133D-01	-0.139920D-01	-43.18	0.000418
13.0	-0.749987D+00	0.103258D+00	172.16	0.573143	13.0	0.174552D-01	-0.162161D-01	-42.89	0.000568
14.0	-0.754416D+00	0.114547D+00	171.37	0.582264	14.0	0.201845D-01	-0.185499D-01	-42.58	0.000752
15.0	-0.759110D+00	0.126554D+00	170.54	0.592263	15.0	0.230971D-01	-0.209800D-01	-42.25	0.000974
16.0	-0.764055D+00	0.139257D+00	169.67	0.603173	16.0	0.261888D-01	-0.234907D-01	-41.89	0.001238
17.0	-0.769238D+00	0.152628D+00	168.78	0.615022	17.0	0.294551D-01	-0.260658D-01	-41.51	0.001547
18.0	-0.774642D+00	0.166641D+00	167.86	0.627839	18.0	0.328908D-01	-0.286883D-01	-41.10	0.001905
19.0	-0.780250D+00	0.181268D+00	166.92	0.641648	19.0	0.364907D-01	-0.313405D-01	-40.66	0.002314
20.0	-0.786044D+00	0.196478D+00	165.97	0.656469	20.0	0.402299D-01	-0.340044D-01	-40.19	0.002776
21.0	-0.792005D+00	0.212241D+00	165.00	0.672318	21.0	0.441593D-01	-0.366612D-01	-39.70	0.003294
22.0	-0.798113D+00	0.228525D+00	164.02	0.689208	22.0	0.482152D-01	-0.392919D-01	-39.18	0.003869
23.0	-0.804346D+00	0.245277D+00	163.04	0.707143	23.0	0.524096D-01	-0.418769D-01	-38.61	0.004500
24.0	-0.810681D+00	0.262524D+00	162.06	0.726123	24.0	0.567350D-01	-0.443966D-01	-38.04	0.005190
25.0	-0.817096D+00	0.280169D+00	161.07	0.746140	25.0	0.611834D-01	-0.468309D-01	-37.43	0.005937
26.0	-0.823564D+00	0.298198D+00	160.10	0.767180	26.0	0.657465D-01	-0.491598D-01	-36.79	0.006739
27.0	-0.830061D+00	0.316574D+00	159.12	0.789220	27.0	0.704154D-01	-0.513632D-01	-36.11	0.007597
28.0	-0.836568D+00	0.335299D+00	158.16	0.812228	28.0	0.751808D-01	-0.534210D-01	-35.40	0.008506
29.0	-0.843027D+00	0.354217D+00	157.21	0.836165	29.0	0.800328D-01	-0.553133D-01	-34.65	0.009465
30.0	-0.849539D+00	0.373408D+00	156.27	0.860981	30.0	0.849612D-01	-0.570203D-01	-33.87	0.010470
31.0	-0.855764D+00	0.392795D+00	155.34	0.886619	31.0	0.899553D-01	-0.585226D-01	-33.05	0.011517
32.0	-0.861968D+00	0.412337D+00	154.44	0.913010	32.0	0.950039D-01	-0.598010D-01	-32.19	0.012602
33.0	-0.868019D+00	0.431995D+00	153.54	0.940077	33.0	0.100095D+00	-0.608371D-01	-31.29	0.013720
34.0	-0.873884D+00	0.451730D+00	152.66	0.967732	34.0	0.105217D+00	-0.616126D-01	-30.35	0.014867
35.0	-0.879526D+00	0.471502D+00	151.80	0.995980	35.0	0.110352D+00	-0.621103D-01	-29.37	0.016036
36.0	-0.884910D+00	0.491271D+00	150.96	1.024413	36.0	0.115503D+00	-0.623133D-01	-28.35	0.017224
37.0	-0.889995D+00	0.510966D+00	150.14	1.053216	37.0	0.120640D+00	-0.622059D-01	-27.28	0.018424
38.0	-0.894755D+00	0.530680D+00	149.33	1.082166	38.0	0.125755D+00	-0.617729D-01	-26.16	0.019630
39.0	-0.899135D+00	0.550161D+00	148.54	1.111128	39.0	0.130833D+00	-0.610005D-01	-25.01	0.020838
40.0	-0.903110D+00	0.569522D+00	147.76	1.139963	40.0	0.135861D+00	-0.598754D-01	-23.78	0.022043
41.0	-0.906625D+00	0.588682D+00	147.00	1.168523	41.0	0.140823D+00	-0.583860D-01	-22.52	0.023240
42.0	-0.909656D+00	0.607604D+00	146.26	1.196654	42.0	0.145703D+00	-0.565216D-01	-21.20	0.024424
43.0	-0.912144D+00	0.626249D+00	145.53	1.224194	43.0	0.150488D+00	-0.542727D-01	-19.83	0.025592
44.0	-0.914055D+00	0.644581D+00	144.81	1.250981	44.0	0.155159D+00	-0.516314D-01	-18.41	0.026740
45.0	-0.915345D+00	0.662563D+00	144.10	1.276846	45.0	0.159703D+00	-0.485912D-01	-16.92	0.027866

CIRCULAR PP POLARIZATION KA= 3.000					CIRCULAR OP POLARIZATION KA= 3.000				
THETA	REAL	IMAG	PHASE	MRC5	THETA	REAL	IMAG	PHASE	MRC5
45.0	-0.915345D+00	0.662553D+00	144.10	1.276846	45.0	0.159703D+00	-0.485912D-01	-16.92	0.077866
46.0	-0.915971D+00	0.680160D+00	143.40	1.301619	45.0	0.164102D+00	-0.451468D-01	-15.38	0.028068
47.0	-0.915889D+00	0.657335D+00	142.72	1.325128	47.0	0.168340D+00	-0.412948D-01	-13.78	0.030044
48.0	-0.915055D+00	0.714005D+00	142.03	1.347202	48.0	0.172401D+00	-0.370333D-01	-12.12	0.031094
49.0	-0.913427D+00	0.730286D+00	141.36	1.367670	49.0	0.176268D+00	-0.323618D-01	-10.40	0.032118
50.0	-0.910960D+00	0.746001D+00	140.69	1.386366	50.0	0.179926D+00	-0.272821D-01	-8.62	0.033118
51.0	-0.907611D+00	0.761163D+00	140.02	1.403137	51.0	0.183357D+00	-0.217971D-01	-6.78	0.034095
52.0	-0.903337D+00	0.775743D+00	139.35	1.417798	52.0	0.186546D+00	-0.159121D-01	-4.88	0.035053
53.0	-0.898095D+00	0.789713D+00	138.67	1.430230	53.0	0.189476D+00	-0.963378D-02	-2.91	0.035994
54.0	-0.891844D+00	0.803055D+00	138.00	1.440283	54.0	0.192131D+00	-0.297105D-02	-0.89	0.036923
55.0	-0.884542D+00	0.815731D+00	137.32	1.447831	55.0	0.194597D+00	-0.406544D-02	1.20	0.037845
56.0	-0.876150D+00	0.827720D+00	136.63	1.452759	56.0	0.196557D+00	0.114631D-01	3.34	0.038766
57.0	-0.866628D+00	0.839000D+00	135.93	1.454945	57.0	0.198296D+00	0.192073D-01	5.53	0.039690
58.0	-0.855938D+00	0.849551D+00	135.21	1.454366	58.0	0.199702D+00	0.272814D-01	7.78	0.040625
59.0	-0.844044D+00	0.859351D+00	134.49	1.450894	59.0	0.200759D+00	0.356671D-01	10.07	0.041576
60.0	-0.830971D+00	0.868383D+00	133.74	1.444503	60.0	0.201454D+00	0.444437D-01	12.41	0.042550
61.0	-0.816507D+00	0.876631D+00	132.97	1.435165	61.0	0.201775D+00	0.532888D-01	14.79	0.043553
62.0	-0.800800D+00	0.884078D+00	132.17	1.422875	62.0	0.201709D+00	0.628780D-01	17.21	0.044590
63.0	-0.783761D+00	0.890714D+00	131.35	1.407652	63.0	0.201247D+00	0.718848D-01	19.66	0.045668
64.0	-0.765360D+00	0.896525D+00	130.49	1.389538	64.0	0.200377D+00	0.814809D-01	22.13	0.046790
65.0	-0.745585D+00	0.901502D+00	129.59	1.368602	65.0	0.199090D+00	0.912361D-01	24.62	0.047961
66.0	-0.724402D+00	0.905637D+00	128.66	1.344936	66.0	0.197379D+00	0.101118D+00	27.13	0.049183
67.0	-0.701796D+00	0.908924D+00	127.67	1.318661	67.0	0.195234D+00	0.111094D+00	29.64	0.050458
68.0	-0.677539D+00	0.911359D+00	126.64	1.289924	68.0	0.192652D+00	0.121260D+00	32.16	0.051786
69.0	-0.652259D+00	0.912939D+00	125.54	1.258899	69.0	0.189625D+00	0.131179D+00	34.67	0.053166
70.0	-0.625306D+00	0.913663D+00	124.39	1.225788	70.0	0.186152D+00	0.141213D+00	37.18	0.054593
71.0	-0.596889D+00	0.913532D+00	123.16	1.190817	71.0	0.182228D+00	0.151187D+00	39.68	0.056064
72.0	-0.567004D+00	0.912549D+00	121.85	1.154240	72.0	0.177853D+00	0.161059D+00	42.16	0.057572
73.0	-0.535655D+00	0.910719D+00	120.46	1.116336	73.0	0.173027D+00	0.170786D+00	44.63	0.059106
74.0	-0.502848D+00	0.908047D+00	118.28	1.074406	74.0	0.167752D+00	0.180322D+00	47.07	0.060657
75.0	-0.468592D+00	0.904542D+00	117.39	1.037775	75.0	0.162030D+00	0.189621D+00	49.49	0.062210
76.0	-0.433902D+00	0.900213D+00	115.68	0.997788	76.0	0.155866D+00	0.198637D+00	51.88	0.063751
77.0	-0.395797D+00	0.895072D+00	113.85	0.957809	77.0	0.149266D+00	0.207319D+00	54.25	0.065262
78.0	-0.357299D+00	0.889132D+00	111.89	0.918218	78.0	0.142238D+00	0.215619D+00	56.59	0.066723
79.0	-0.317438D+00	0.882406D+00	109.79	0.879407	79.0	0.134790D+00	0.223487D+00	58.90	0.068115
80.0	-0.276244D+00	0.874912D+00	107.52	0.841781	80.0	0.126934D+00	0.230871D+00	61.20	0.069414
81.0	-0.233755D+00	0.866666D+00	105.09	0.805752	81.0	0.118682D+00	0.237720D+00	63.47	0.070596
82.0	-0.190074D+00	0.857689D+00	102.49	0.771736	82.0	0.110047D+00	0.243981D+00	65.72	0.071637
83.0	-0.145066D+00	0.848000D+00	99.71	0.740148	83.0	0.101454D+00	0.249601D+00	67.96	0.072511
84.0	-0.989630D-01	0.837621D+00	96.74	0.711403	84.0	0.916935D-01	0.254529D+00	70.19	0.073193
85.0	-0.517617D-01	0.826576D+00	93.58	0.685907	85.0	0.820106D-01	0.258711D+00	72.41	0.073657
86.0	-0.352302D-02	0.814888D+00	90.25	0.664055	86.0	0.720168D-01	0.262095D+00	74.64	0.073880
87.0	0.456872D-01	0.802584D+00	86.74	0.646228	87.0	0.617338D-01	0.264626D+00	76.87	0.073838
88.0	0.957982D-01	0.789689D+00	83.08	0.632786	88.0	0.511847D-01	0.266254D+00	79.12	0.073511
89.0	0.146735D+00	0.776232D+00	79.30	0.624067	89.0	0.403443D-01	0.266927D+00	81.39	0.072882
90.0	0.198417D+00	0.762240D+00	75.41	0.620380	90.0	0.293887D-01	0.266592D+00	83.71	0.071935

CIRCULAR PP POLARIZATION KA= 3.000					CIRCULAR OP POLARIZATION KA= 3.000				
THETA	REAL	IMAG	PHASE	NRCS	THETA	REAL	IMAG	PHASE	NRCS
90.0	0.198417D+00	0.762240D+00	75.41	0.620380	90.0	0.293887D-01	0.266592D+00	83.71	0.071935
91.0	0.250761D+00	0.747745D+00	71.46	0.622003	91.0	0.181954D-01	0.265200D+00	86.08	0.070662
92.0	0.303677D+00	0.732778D+00	67.49	0.629178	92.0	0.684320D-02	0.262702D+00	88.51	0.069059
93.0	0.357073D+00	0.717361D+00	63.54	0.642108	93.0	-0.463799D-02	0.259048D+00	91.03	0.067127
94.0	0.408530D+00	0.701536D+00	59.64	0.660952	94.0	-0.162169D-01	0.254191D+00	93.65	0.064876
95.0	0.454915D+00	0.685331D+00	55.85	0.685624	95.0	-0.278614D-01	0.248086D+00	96.41	0.062323
96.0	0.519155D+00	0.668779D+00	52.18	0.716787	96.0	-0.395382D-01	0.240689D+00	99.33	0.059494
97.0	0.573466D+00	0.651913D+00	48.66	0.753854	97.0	-0.512130D-01	0.231956D+00	102.45	0.056426
98.0	0.627737D+00	0.634767D+00	45.32	0.796982	98.0	-0.628510D-01	0.221847D+00	105.82	0.053166
99.0	0.681855D+00	0.617373D+00	42.16	0.846075	99.0	-0.744165D-01	0.210324D+00	109.48	0.049774
100.0	0.735703D+00	0.599765D+00	39.19	0.900978	100.0	-0.858733D-01	0.197349D+00	113.52	0.046321
101.0	0.789165D+00	0.581978D+00	36.41	0.961479	101.0	-0.971845D-01	0.182889D+00	117.99	0.042893
102.0	0.842411D+00	0.564044D+00	33.61	1.027310	102.0	-0.108313D+00	0.166910D+00	122.98	0.039591
103.0	0.894444D+00	0.545998D+00	31.40	1.098143	103.0	-0.119222D+00	0.149385D+00	128.59	0.036530
104.0	0.945018D+00	0.527871D+00	29.16	1.173598	104.0	-0.129873D+00	0.130287D+00	134.91	0.033841
105.0	0.996717D+00	0.509699D+00	27.09	1.253239	105.0	-0.140229D+00	0.109590D+00	141.99	0.031674
106.0	0.104682D+01	0.491512D+00	25.16	1.336576	106.0	-0.150253D+00	0.872749D-01	149.35	0.030193
107.0	0.109500D+01	0.473434D+00	23.38	1.423075	107.0	-0.159908D+00	0.532333D-01	158.40	0.029580
108.0	0.114233D+01	0.455224D+00	21.77	1.512155	108.0	-0.169157D+00	0.377202D-01	167.43	0.030037
109.0	0.118830D+01	0.437186D+00	20.20	1.603193	109.0	-0.177964D+00	0.104543D-01	176.64	0.031781
110.0	0.123278D+01	0.419258D+00	18.75	1.695531	110.0	-0.186294D+00	-0.194828D-01	-174.33	0.035047
111.0	0.127660D+01	0.401471D+00	17.47	1.788483	111.0	-0.194113D+00	-0.490958D-01	-165.31	0.040090
112.0	0.131681D+01	0.383853D+00	16.25	1.881334	112.0	-0.201386D+00	-0.813860D-01	-157.39	0.047180
113.0	0.135613D+01	0.366431D+00	15.12	1.973355	113.0	-0.208082D+00	-0.113510D+00	-151.90	0.056604
114.0	0.139330D+01	0.349233D+00	14.07	2.063803	114.0	-0.214170D+00	-0.150885D+00	-144.82	0.088665
115.0	0.142882D+01	0.332284D+00	13.09	2.151932	115.0	-0.219619D+00	-0.186278D+00	-139.19	0.083681
116.0	0.146198D+01	0.315609D+00	12.18	2.236997	116.0	-0.224402D+00	-0.227217D+00	-134.64	0.101984
117.0	0.149289D+01	0.299231D+00	11.33	2.318266	117.0	-0.228493D+00	-0.267784D+00	-130.87	0.123917
118.0	0.152146D+01	0.283173D+00	10.54	2.395022	118.0	-0.231865D+00	-0.309950D+00	-126.80	0.149836
119.0	0.154759D+01	0.267476D+00	9.81	2.466575	119.0	-0.234498D+00	-0.353716D+00	-123.54	0.180104
120.0	0.157121D+01	0.252099D+00	9.12	2.532268	120.0	-0.236370D+00	-0.399026D+00	-120.64	0.215993
121.0	0.159225D+01	0.237121D+00	8.47	2.591484	121.0	-0.237463D+00	-0.445858D+00	-118.04	0.255178
122.0	0.161063D+01	0.222540D+00	7.87	2.643651	122.0	-0.237760D+00	-0.494175D+00	-115.69	0.300738
123.0	0.162623D+01	0.208369D+00	7.30	2.688253	123.0	-0.237247D+00	-0.543936D+00	-113.57	0.352152
124.0	0.163919D+01	0.194625D+00	6.77	2.724833	124.0	-0.235914D+00	-0.595097D+00	-111.62	0.405795
125.0	0.164928D+01	0.181320D+00	6.27	2.752998	125.0	-0.233750D+00	-0.647610D+00	-109.85	0.474038
126.0	0.165652D+01	0.168466D+00	5.81	2.772427	126.0	-0.230751D+00	-0.701424D+00	-108.11	0.545241
127.0	0.166080D+01	0.156671D+00	5.37	2.782872	127.0	-0.226911D+00	-0.756484D+00	-106.10	0.623756
128.0	0.166238D+01	0.144166D+00	4.96	2.784163	128.0	-0.222323D+00	-0.812730D+00	-105.29	0.709917
129.0	0.166090D+01	0.132696D+00	4.57	2.776210	129.0	-0.216713D+00	-0.870101D+00	-103.99	0.804040
130.0	0.165656D+01	0.121728D+00	4.20	2.759005	130.0	-0.210361D+00	-0.928530D+00	-102.77	0.908420
131.0	0.164932D+01	0.111245D+00	3.86	2.732622	131.0	-0.203182D+00	-0.987950D+00	-101.62	1.017328
132.0	0.163920D+01	0.101250D+00	3.53	2.697218	132.0	-0.195188D+00	-0.104829D+01	-100.55	1.137003
133.0	0.162623D+01	0.917444D-01	3.21	2.653030	133.0	-0.186391D+00	-0.110947D+01	-99.54	1.265656
134.0	0.161044D+01	0.827282D-01	2.94	2.603374	134.0	-0.176808D+00	-0.117481D+01	-98.58	1.403461
135.0	0.159190D+01	0.741995D-01	2.67	2.559642	135.0	-0.166459D+00	-0.123404D+01	-97.68	1.550552

CIRCULAR PP POLARIZATION KA= 3.000					CIRCULAR OP POLARIZATION KA= 3.000				
THETA	REAL	IMAG	PHASE	NRCS	THETA	REAL	IMAG	PHASE	NRCS
135.0	0.159190D+01	0.731995D-01	2.67	2.539642	135.0	-0.166459D+00	-0.123404D+01	-97.68	1.550552
136.0	0.157064D+01	0.661554D-01	2.41	2.471277	136.0	-0.155336D+00	-0.129726D+01	-96.83	1.707025
137.0	0.154675D+01	0.585918D-01	2.17	2.395867	137.0	-0.143549D+00	-0.136100D+01	-96.02	1.872928
138.0	0.152029D+01	0.515030D-01	1.94	2.313943	138.0	-0.131041D+00	-0.142516D+01	-95.25	2.048264
139.0	0.149136D+01	0.448822D-01	1.72	2.226167	139.0	-0.117871D+00	-0.148956D+01	-94.52	2.232985
140.0	0.146004D+01	0.387215D-01	1.52	2.133228	140.0	-0.104071D+00	-0.155440D+01	-93.83	2.426992
141.0	0.142645D+01	0.330118D-01	1.33	2.035856	141.0	-0.089676D+00	-0.161929D+01	-93.17	2.630130
142.0	0.139070D+01	0.277428D-01	1.14	1.934807	142.0	-0.074724D+00	-0.168422D+01	-92.54	2.842190
143.0	0.135290D+01	0.229032D-01	0.97	1.830861	143.0	-0.059256D+00	-0.174911D+01	-91.94	3.062905
144.0	0.131319D+01	0.184809D-01	0.81	1.724808	144.0	-0.043136D+00	-0.181386D+01	-91.37	3.291950
145.0	0.127170D+01	0.144626D-01	0.65	1.617442	145.0	-0.026940D+00	-0.187835D+01	-90.82	3.528943
146.0	0.122859D+01	0.108344D-01	0.51	1.509550	146.0	-0.010182D+00	-0.194251D+01	-90.30	3.773440
147.0	0.118400D+01	0.758140D-02	0.37	1.401304	147.0	0.069106D-02	-0.200621D+01	-89.80	4.024941
148.0	0.113868D+01	0.468816D-02	0.24	1.295252	148.0	0.242311D-01	-0.206937D+01	-89.33	4.282887
149.0	0.109101D+01	0.213850D-02	0.11	1.190306	149.0	0.419069D-01	-0.213188D+01	-88.87	4.546663
150.0	0.104295D+01	-0.042936D-04	-0.00	1.087741	150.0	0.597059D-01	-0.219363D+01	-88.44	4.815599
151.0	0.994071D+00	-0.199744D-02	-0.12	0.988182	151.0	0.776347D-01	-0.225454D+01	-88.03	5.094972
152.0	0.98556D+00	-0.361859D-02	-0.22	0.892198	152.0	0.956389D-01	-0.231449D+01	-87.63	5.384006
153.0	0.974581D+00	-0.496570D-02	-0.32	0.800301	153.0	0.113663D+00	-0.237139D+01	-87.26	5.683883
154.0	0.844332D+00	-0.605703D-02	-0.41	0.712933	154.0	0.131653D+00	-0.243113D+01	-86.90	5.927736
155.0	0.753997D+00	-0.691152D-02	-0.50	0.630470	155.0	0.149551D+00	-0.248763D+01	-86.56	6.174061
156.0	0.743746D+00	-0.754614D-02	-0.58	0.553215	156.0	0.167302D+00	-0.254278D+01	-86.24	6.493717
157.0	0.693783D+00	-0.798103D-02	-0.66	0.481398	157.0	0.184849D+00	-0.259690D+01	-85.93	6.775931
158.0	0.644287D+00	-0.873418D-02	-0.73	0.415174	158.0	0.202138D+00	-0.264867D+01	-85.64	7.056306
159.0	0.595445D+00	-0.932398D-02	-0.80	0.354624	159.0	0.219112D+00	-0.269922D+01	-85.36	7.338823
160.0	0.547439D+00	-0.926862D-02	-0.87	0.299757	160.0	0.235718D+00	-0.274807D+01	-85.10	7.607448
161.0	0.500450D+00	-0.808602D-02	-0.93	0.250515	161.0	0.251902D+00	-0.279512D+01	-84.85	7.876138
162.0	0.454656D+00	-0.775373D-02	-0.98	0.206773	162.0	0.267610D+00	-0.284029D+01	-84.62	8.138846
163.0	0.410230D+00	-0.740489D-02	-1.03	0.168344	163.0	0.282793D+00	-0.288350D+01	-84.40	8.394530
164.0	0.367342D+00	-0.694816D-02	-1.08	0.134989	164.0	0.297399D+00	-0.292467D+01	-84.19	8.642155
165.0	0.326156D+00	-0.642762D-02	-1.13	0.106419	165.0	0.311383D+00	-0.296374D+01	-84.00	8.880704
166.0	0.286828D+00	-0.586273D-02	-1.17	0.082306	166.0	0.324596D+00	-0.300063D+01	-83.82	9.109180
167.0	0.249509D+00	-0.526829D-02	-1.21	0.062282	167.0	0.337295D+00	-0.303527D+01	-83.66	9.326617
168.0	0.214343D+00	-0.465832D-02	-1.25	0.045964	168.0	0.349139D+00	-0.306760D+01	-83.51	9.532083
169.0	0.181465D+00	-0.404608D-02	-1.28	0.032936	169.0	0.360187D+00	-0.309757D+01	-83.37	9.724686
170.0	0.151001D+00	-0.344385D-02	-1.31	0.022813	170.0	0.370403D+00	-0.312512D+01	-83.24	9.903581
171.0	0.123071D+00	-0.286320D-02	-1.33	0.015355	171.0	0.379753D+00	-0.315020D+01	-83.11	10.067977
172.0	0.097781D+00	-0.231462D-02	-1.36	0.009567	172.0	0.388206D+00	-0.317276D+01	-83.01	10.217141
173.0	0.075230D+00	-0.180764D-02	-1.38	0.005663	173.0	0.395732D+00	-0.319277D+01	-82.93	10.350400
174.0	0.055055D+00	-0.135076D-02	-1.39	0.003083	174.0	0.402307D+00	-0.321019D+01	-82.86	10.467153
175.0	0.386837D-01	-0.951404D-03	-1.41	0.001497	175.0	0.407908D+00	-0.322498D+01	-82.79	10.566866
176.0	0.248361D-01	-0.615922D-03	-1.42	0.000617	176.0	0.412518D+00	-0.323711D+01	-82.74	10.649083
177.0	0.139968D-01	-0.349535D-03	-1.43	0.000196	177.0	0.416119D+00	-0.324658D+01	-82.70	10.713427
178.0	0.623179D-02	-0.156328D-03	-1.44	0.000039	178.0	0.418700D+00	-0.325353D+01	-82.67	10.759600
179.0	0.594747D-02	-0.352290D-04	-1.44	0.000002	179.0	0.420252D+00	-0.325742D+01	-82.65	10.787390
180.0	0.107560D-11	-0.369560D-11	73.77	0.000000	180.0	0.420770D+00	-0.325878D+01	-82.64	10.796668

CIRCULAR PP POLARIZATION KA= 3.000

CIRCULAR OF POLARIZATION KA= 3.000

THETA	REAL	IMAG	PHASE	NRCS	THETA	REAL	IMAG	PHASE	NRCS
135.0	0.159190D+01	0.721995D-01	2.67	2.539642	135.0	-0.166459D+00	-0.123404D+01	-97.68	1.550552
136.0	0.157064D+01	0.661554D-01	2.41	2.471297	136.0	-0.155344D+00	-0.129726D+01	-96.83	1.707025
137.0	0.154675D+01	0.585918D-01	2.17	2.395867	137.0	-0.143549D+00	-0.136100D+01	-96.02	1.872928
138.0	0.152029D+01	0.515030D-01	1.94	2.313943	138.0	-0.131041D+00	-0.142516D+01	-95.25	2.048264
139.0	0.149136D+01	0.448822D-01	1.72	2.22167	139.0	-0.117871D+00	-0.148966D+01	-94.52	2.232985
140.0	0.146004D+01	0.387215D-01	1.52	2.13228	140.0	-0.104071D+00	-0.155440D+01	-93.83	2.426992
141.0	0.142645D+01	0.330118D-01	1.33	2.025856	141.0	-0.089676D-01	-0.161929D+01	-93.17	2.630130
142.0	0.139070D+01	0.277428D-01	1.14	1.934807	142.0	-0.074724D-01	-0.168422D+01	-92.54	2.842190
143.0	0.135290D+01	0.229032D-01	0.97	1.830861	143.0	-0.059256D-01	-0.174911D+01	-91.94	3.062905
144.0	0.131319D+01	0.184809D-01	0.81	1.724908	144.0	-0.043313D-01	-0.181386D+01	-91.37	3.291950
145.0	0.127170D+01	0.144626D-01	0.65	1.617442	145.0	-0.026940D-01	-0.187835D+01	-90.82	3.528943
146.0	0.122859D+01	0.108344D-01	0.51	1.509550	146.0	-0.010182D-01	-0.194251D+01	-90.30	3.773440
147.0	0.118400D+01	0.758140D-02	0.37	1.401904	147.0	0.029108D-02	-0.200621D+01	-89.80	4.024941
148.0	0.113808D+01	0.468816D-02	0.24	1.295252	148.0	0.024291D-01	-0.206937D+01	-89.33	4.282887
149.0	0.109101D+01	0.213850D-02	0.11	1.190306	149.0	0.041906D-01	-0.213188D+01	-88.87	4.546663
150.0	0.104295D+01	-0.842936D-04	-0.00	1.087741	150.0	0.059705D-01	-0.219363D+01	-88.44	4.815559
151.0	0.994071D+00	-0.199744D-02	-0.12	0.988182	151.0	0.077638D-01	-0.225454D+01	-88.03	5.092772
152.0	0.945566D+00	-0.361659D-02	-0.22	0.892198	152.0	0.095638D-01	-0.231440D+01	-87.63	5.360000
153.0	0.894561D+00	-0.496570D-02	-0.32	0.803031	153.0	0.113663D+00	-0.237339D+01	-87.26	5.625883
154.0	0.844332D+00	-0.605703D-02	-0.41	0.712933	154.0	0.131653D+00	-0.243113D+01	-86.90	5.927736
155.0	0.793991D+00	-0.691102D-02	-0.50	0.630470	155.0	0.149551D+00	-0.248763D+01	-86.56	6.210661
156.0	0.743746D+00	-0.754614D-02	-0.58	0.553215	156.0	0.167302D+00	-0.254478D+01	-86.24	6.493717
157.0	0.693783D+00	-0.798103D-02	-0.66	0.481398	157.0	0.184849D+00	-0.259649D+01	-85.93	6.775931
158.0	0.644287D+00	-0.823418D-02	-0.73	0.413174	158.0	0.202138D+00	-0.264867D+01	-85.64	7.056306
159.0	0.595445D+00	-0.832398D-02	-0.80	0.354624	159.0	0.219112D+00	-0.269922D+01	-85.36	7.333823
160.0	0.547439D+00	-0.826662D-02	-0.87	0.299757	160.0	0.235718D+00	-0.274807D+01	-85.10	7.607448
161.0	0.500550D+00	-0.808602D-02	-0.93	0.250515	161.0	0.251902D+00	-0.279512D+01	-84.85	7.876138
162.0	0.454656D+00	-0.775373D-02	-0.98	0.205773	162.0	0.267610D+00	-0.284039D+01	-84.62	8.138846
163.0	0.410230D+00	-0.740489D-02	-1.03	0.168344	163.0	0.282793D+00	-0.288350D+01	-84.40	8.394530
164.0	0.367382D+00	-0.694816D-02	-1.08	0.135989	164.0	0.297399D+00	-0.292467D+01	-84.19	8.642155
165.0	0.326156D+00	-0.642762D-02	-1.13	0.104419	165.0	0.311383D+00	-0.296374D+01	-84.00	8.880704
166.0	0.286828D+00	-0.586273D-02	-1.17	0.082306	166.0	0.324696D+00	-0.300063D+01	-83.82	9.109180
167.0	0.249509D+00	-0.526829D-02	-1.21	0.062282	167.0	0.337295D+00	-0.303527D+01	-83.66	9.326617
168.0	0.214343D+00	-0.465832D-02	-1.25	0.045964	168.0	0.349139D+00	-0.306760D+01	-83.51	9.532083
169.0	0.181465D+00	-0.404604D-02	-1.28	0.032936	169.0	0.360187D+00	-0.309757D+01	-83.37	9.724886
170.0	0.151001D+00	-0.344385D-02	-1.31	0.022813	170.0	0.370403D+00	-0.312752D+01	-83.24	9.903581
171.0	0.123071D+00	-0.286320D-02	-1.33	0.015155	171.0	0.379753D+00	-0.315020D+01	-83.13	10.067977
172.0	0.977813D-01	-0.231462D-02	-1.36	0.009567	172.0	0.388206D+00	-0.317276D+01	-83.02	10.217141
173.0	0.752303D-01	-0.180764D-02	-1.38	0.005663	173.0	0.395732D+00	-0.319277D+01	-82.93	10.350400
174.0	0.555055D-01	-0.135076D-02	-1.39	0.003083	174.0	0.402307D+00	-0.321019D+01	-82.84	10.467153
175.0	0.386637D-01	-0.951404D-03	-1.41	0.001497	175.0	0.407908D+00	-0.322498D+01	-82.73	10.566866
176.0	0.248301D-01	-0.615922D-03	-1.42	0.000617	176.0	0.412518D+00	-0.323711D+01	-82.73	10.649083
177.0	0.139988D-01	-0.349535D-03	-1.43	0.000196	177.0	0.416119D+00	-0.324658D+01	-82.70	10.713427
178.0	0.623179D-02	-0.156328D-03	-1.44	0.000039	178.0	0.418700D+00	-0.325335D+01	-82.67	10.759600
179.0	0.155947D-02	-0.392290D-04	-1.44	0.000002	179.0	0.420520D+00	-0.325742D+01	-82.65	10.787390
180.0	0.107560D-11	0.369560D-11	73.77	0.000000	180.0	0.420770D+00	-0.325878D+01	-82.64	10.796668

CIRCULAR PP POLARIZATION KA= 4.000					CIRCULAR OP POLARIZATION KA= 4.000				
THETA	REAL	IMAG	PHASE	MRCS	THETA	REAL	IMAG	PHASE	MRCS
45.0	-0.215600D+00	-0.102113D+01	-101.93	1.089220	45.0	-0.139835D+00	0.161748D+01	173.40	0.019815
46.0	-0.235600D+00	-0.100714D+01	-103.17	1.069848	46.0	-0.140222D+00	0.105095D+01	175.71	0.019773
47.0	-0.256430D+00	-0.991687D+00	-104.50	1.049200	47.0	-0.140153D+00	0.458356D+02	178.13	0.019684
48.0	-0.278135D+00	-0.974755D+00	-105.93	1.027506	48.0	-0.139610D+00	-0.156972D+02	-179.36	0.019493
49.0	-0.300710D+00	-0.956346D+00	-107.46	1.005024	49.0	-0.138577D+00	-0.791410D+02	-176.73	0.019266
50.0	-0.324142D+00	-0.936464D+00	-109.09	0.982034	50.0	-0.137041D+00	-0.144105D+01	-174.00	0.018988
51.0	-0.348411D+00	-0.915120D+00	-110.84	0.958836	51.0	-0.134989D+00	-0.210172D+01	-171.15	0.018664
52.0	-0.373503D+00	-0.892326D+00	-112.71	0.935750	52.0	-0.132412D+00	-0.276899D+01	-168.19	0.018300
53.0	-0.399382D+00	-0.868103D+00	-114.71	0.913109	53.0	-0.129302D+00	-0.343820D+01	-165.11	0.017901
54.0	-0.426016D+00	-0.842476D+00	-116.82	0.891256	54.0	-0.125654D+00	-0.410450D+01	-161.91	0.017474
55.0	-0.453368D+00	-0.815475D+00	-119.07	0.870541	55.0	-0.121468D+00	-0.476282D+01	-159.59	0.017022
56.0	-0.481351D+00	-0.787134D+00	-121.45	0.851317	56.0	-0.116732D+00	-0.540797D+01	-155.14	0.016551
57.0	-0.510034D+00	-0.757498D+00	-123.95	0.833933	57.0	-0.111660D+00	-0.603458D+01	-151.57	0.016065
58.0	-0.539241D+00	-0.726601D+00	-126.58	0.818730	58.0	-0.105654D+00	-0.663723D+01	-147.86	0.015568
59.0	-0.568965D+00	-0.694504D+00	-129.32	0.806037	59.0	-0.993217D+01	-0.721039D+01	-144.02	0.015084
60.0	-0.599084D+00	-0.661257D+00	-132.16	0.796161	60.0	-0.924732D+01	-0.774850D+01	-140.04	0.014555
61.0	-0.629573D+00	-0.626919D+00	-135.12	0.789389	61.0	-0.851225D+01	-0.824599D+01	-135.91	0.014045
62.0	-0.660332D+00	-0.591553D+00	-138.14	0.785974	62.0	-0.772868D+01	-0.869732D+01	-131.63	0.013538
63.0	-0.691272D+00	-0.555228D+00	-141.23	0.786135	63.0	-0.689854D+01	-0.909702D+01	-127.17	0.013035
64.0	-0.722297D+00	-0.518012D+00	-144.35	0.790050	64.0	-0.602413D+01	-0.943971D+01	-122.54	0.012540
65.0	-0.753306D+00	-0.479982D+00	-147.50	0.797852	65.0	-0.510893D+01	-0.972015D+01	-117.72	0.012057
66.0	-0.784189D+00	-0.441216D+00	-150.64	0.809624	66.0	-0.415312D+01	-0.993327D+01	-112.69	0.011592
67.0	-0.814834D+00	-0.401793D+00	-153.75	0.825391	67.0	-0.316257D+01	-0.100742D+00	-107.43	0.011149
68.0	-0.845126D+00	-0.361798D+00	-156.82	0.845126	68.0	-0.213949D+01	-0.101349D+00	-101.92	0.010737
69.0	-0.874923D+00	-0.321317D+00	-159.83	0.868735	69.0	-0.108864D+01	-0.101215D+00	-96.14	0.010363
70.0	-0.904112D+00	-0.280439D+00	-162.77	0.896065	70.0	-0.129932D+03	-0.100195D+00	-90.07	0.010039
71.0	-0.932554D+00	-0.239253D+00	-165.61	0.926798	71.0	-0.104207D+01	-0.982883D+01	-83.71	0.009778
72.0	-0.960108D+00	-0.197852D+00	-168.36	0.960953	72.0	0.219446D+01	-0.954624D+01	-77.05	0.009595
73.0	-0.986632D+00	-0.156329D+00	-171.00	0.997280	73.0	0.331707D+01	-0.916849D+01	-70.11	0.009507
74.0	-0.101198D+01	-0.114776D+01	-173.53	1.037280	74.0	0.444582D+01	-0.869468D+01	-62.92	0.009536
75.0	-0.103601D+01	-0.732895D+01	-175.95	1.076881	75.0	0.557563D+01	-0.812159D+01	-55.53	0.009705
76.0	-0.105856D+01	-0.319626D+01	-178.27	1.121564	76.0	0.670125D+01	-0.744843D+01	-49.02	0.010039
77.0	-0.107948D+01	0.911003D+02	179.52	1.165361	77.0	0.781733D+01	-0.567452D+01	-40.49	0.010566
78.0	-0.109862D+01	0.498347D+01	177.40	1.208459	78.0	0.891840D+01	-0.379974D+01	-33.04	0.011317
79.0	-0.111584D+01	0.901185D+01	175.32	1.253213	79.0	0.999892D+01	-0.182463D+01	-25.76	0.012326
80.0	-0.113097D+01	0.129870D+00	173.45	1.295950	80.0	0.119533D+00	-0.375036D+01	-18.74	0.013624
81.0	-0.114386D+01	0.168999D+00	171.60	1.336979	81.0	0.120759D+00	-0.257877D+01	-12.05	0.015248
82.0	-0.115838D+01	0.207417D+00	169.81	1.375604	82.0	0.130612D+00	-0.131240D+01	-5.74	0.017232
83.0	-0.116236D+01	0.245039D+00	168.10	1.411135	83.0	0.140036D+00	0.455252D+03	0.19	0.019610
84.0	-0.116769D+01	0.281781D+00	166.43	1.442897	84.0	0.148977D+00	0.149105D+01	5.72	0.022416
85.0	-0.117021D+01	0.317563D+00	164.82	1.470245	85.0	0.157380D+00	0.301950D+01	10.86	0.025680
86.0	-0.116981D+01	0.352307D+00	163.24	1.492575	86.0	0.165194D+00	0.462548D+01	15.64	0.029429
87.0	-0.116636D+01	0.385950D+00	161.69	1.509339	87.0	0.172369D+00	0.630283D+01	20.09	0.033684
88.0	-0.115974D+01	0.418391D+00	160.16	1.520052	88.0	0.178857D+00	0.804465D+01	24.22	0.038462
89.0	-0.114969D+01	0.449594D+00	158.64	1.524312	89.0	0.184612D+00	0.984344D+01	28.07	0.043771
90.0	-0.113662D+01	0.479487D+00	157.13	1.521803	90.0	0.189592D+00	0.116906D+00	31.66	0.049613

CIRCULAR PP POLARIZATION					CIRCULAR OF POLARIZATION					CIRCULAR OF POLARIZATION				
K= 4.000					K= 4.000					K= 4.000				
THETA	REAL	IMAG	PHASE	PHASE	THETA	REAL	IMAG	PHASE	PHASE	THETA	REAL	IMAG	PHASE	PHASE
90.0	0.113662D+01	0.479487D+00	157.13	1.52 03	90.0	0.189592D+00	0.116908D+00	31.66	0.049613	90.0	0.189592D+00	0.116908D+00	31.66	0.049613
91.0	-0.111953D+01	0.508012D+00	155.65	1.512313	91.0	0.193757D+00	0.135777D+00	35.02	0.055977	92.0	0.197070D+00	0.154944D+00	38.18	0.062844
92.0	-0.109972D+01	0.535116D+00	154.05	1.495736	92.0	0.197070D+00	0.154944D+00	38.18	0.062844	93.0	0.199501D+00	0.174306D+00	41.18	0.070183
93.0	-0.107594D+01	0.560752D+00	152.47	1.472087	93.0	0.199501D+00	0.174306D+00	41.18	0.070183	94.0	0.201019D+00	0.193751D+00	43.95	0.077948
94.0	-0.104875D+01	0.584875D+00	150.85	1.445249	94.0	0.201019D+00	0.193751D+00	43.95	0.077948	95.0	0.201603D+00	0.213164D+00	46.50	0.086083
95.0	-0.101788D+01	0.607447D+00	149.16	1.404249	95.0	0.201603D+00	0.213164D+00	46.50	0.086083	96.0	0.201232D+00	0.232423D+00	49.11	0.094515
96.0	-0.982787D+00	0.628435D+00	147.40	1.360721	96.0	0.201232D+00	0.232423D+00	49.11	0.094515	97.0	0.199893D+00	0.251398D+00	51.51	0.103158
97.0	-0.944365D+00	0.647812D+00	145.55	1.311447	97.0	0.199893D+00	0.251398D+00	51.51	0.103158	98.0	0.197575D+00	0.269957D+00	53.80	0.111913
98.0	-0.902285D+00	0.665554D+00	143.59	1.257082	98.0	0.197575D+00	0.269957D+00	53.80	0.111913	99.0	0.194275D+00	0.287963D+00	55.99	0.120665
99.0	-0.856603D+00	0.681846D+00	141.49	1.194406	99.0	0.194275D+00	0.287963D+00	55.99	0.120665	100.0	0.189993D+00	0.305274D+00	58.10	0.129289
100.0	-0.807339D+00	0.696075D+00	139.23	1.136316	100.0	0.189993D+00	0.305274D+00	58.10	0.129289	101.0	0.184738D+00	0.321743D+00	60.14	0.137647
101.0	-0.754567D+00	0.708834D+00	136.79	1.071817	101.0	0.184738D+00	0.321743D+00	60.14	0.137647	102.0	0.178520D+00	0.337222D+00	62.10	0.145588
102.0	-0.698369D+00	0.719924D+00	134.13	1.006009	102.0	0.178520D+00	0.337222D+00	62.10	0.145588	103.0	0.171359D+00	0.351561D+00	64.01	0.152959
103.0	-0.638874D+00	0.729348D+00	131.22	0.940074	103.0	0.171359D+00	0.351561D+00	64.01	0.152959	104.0	0.163277D+00	0.364604D+00	65.88	0.159596
104.0	-0.576123D+00	0.737116D+00	128.01	0.872258	104.0	0.163277D+00	0.364604D+00	65.88	0.159596	105.0	0.154304D+00	0.376199D+00	67.70	0.165335
105.0	-0.510335D+00	0.743244D+00	124.47	0.812853	105.0	0.154304D+00	0.376199D+00	67.70	0.165335	106.0	0.144476D+00	0.386188D+00	69.49	0.170015
106.0	-0.441640D+00	0.747751D+00	120.57	0.754176	106.0	0.144476D+00	0.386188D+00	69.49	0.170015	107.0	0.133832D+00	0.394417D+00	71.26	0.173476
107.0	-0.370212D+00	0.750661D+00	116.25	0.700550	107.0	0.133832D+00	0.394417D+00	71.26	0.173476	108.0	0.122419D+00	0.400731D+00	73.01	0.175572
108.0	-0.296245D+00	0.752006D+00	111.50	0.653275	108.0	0.122419D+00	0.400731D+00	73.01	0.175572	109.0	0.110287D+00	0.404977D+00	74.77	0.176169
109.0	-0.219947D+00	0.751819D+00	106.21	0.613609	109.0	0.110287D+00	0.404977D+00	74.77	0.176169	110.0	0.974946D+01	0.407001D+00	76.53	0.175155
110.0	-0.141545D+00	0.750139D+00	100.69	0.582744	110.0	0.974946D+01	0.407001D+00	76.53	0.175155	111.0	0.841015D+01	0.406657D+00	78.32	0.172443
111.0	-0.612789D+01	0.747009D+00	94.69	0.561777	111.0	0.841015D+01	0.406657D+00	78.32	0.172443	112.0	0.701739D+01	0.403798D+00	80.14	0.167978
112.0	-0.205934D+01	0.742475D+00	88.41	0.551693	112.0	0.701739D+01	0.403798D+00	80.14	0.167978	113.0	0.557821D+01	0.398284D+00	82.03	0.161742
113.0	-0.103802D+00	0.736589D+00	81.98	0.533338	113.0	0.557821D+01	0.398284D+00	82.03	0.161742	114.0	0.410003D+01	0.389790D+00	84.00	0.153765
114.0	0.188032D+00	0.729403D+00	75.54	0.567397	114.0	0.410003D+01	0.389790D+00	84.00	0.153765	115.0	0.259062D+01	0.378752D+00	86.09	0.144124
115.0	0.273080D+00	0.720976D+00	69.26	0.594380	115.0	0.259062D+01	0.378752D+00	86.09	0.144124	116.0	0.105809D+01	0.364480D+00	88.34	0.132958
116.0	0.358549D+00	0.711368D+00	63.25	0.634602	116.0	0.105809D+01	0.364480D+00	88.34	0.132958	117.0	-0.489165D+02	0.347045D+00	90.81	0.120464
117.0	0.444154D+00	0.700441D+00	57.63	0.684171	117.0	-0.489165D+02	0.347045D+00	90.81	0.120464	118.0	-0.204254D+01	0.326340D+00	93.58	0.106915
118.0	0.529573D+00	0.688860D+00	52.45	0.754976	118.0	-0.204254D+01	0.326340D+00	93.58	0.106915	119.0	-0.359321D+01	0.302263D+00	96.78	0.092654
119.0	0.614476D+00	0.676092D+00	47.73	0.834682	119.0	-0.359321D+01	0.302263D+00	96.78	0.092654	120.0	-0.513225D+01	0.274725D+00	100.58	0.078108
120.0	0.698531D+00	0.662407D+00	43.48	0.926728	120.0	-0.513225D+01	0.274725D+00	100.58	0.078108	121.0	-0.665061D+01	0.243642D+00	105.27	0.063785
121.0	0.781401D+00	0.648733D+00	39.66	1.030327	121.0	-0.665061D+01	0.243642D+00	105.27	0.063785	122.0	-0.813923D+01	0.208946D+00	111.28	0.050283
122.0	0.862750D+00	0.632563D+00	36.25	1.144473	122.0	-0.813923D+01	0.208946D+00	111.28	0.050283	123.0	-0.958907D+01	0.170576D+00	119.34	0.038291
123.0	0.942281D+00	0.616547D+00	33.20	1.267499	123.0	-0.958907D+01	0.170576D+00	119.34	0.038291	124.0	-0.109911D+00	0.128444D+00	130.55	0.028589
124.0	0.101954D+01	0.599899D+00	30.47	1.399346	124.0	-0.109911D+00	0.128444D+00	130.55	0.028589	125.0	-0.123366D+00	0.826344D+01	146.18	0.022048
125.0	0.109433D+01	0.582690D+00	28.03	1.537075	125.0	-0.123366D+00	0.826344D+01	146.18	0.022048	126.0	-0.136169D+00	0.330032D+01	166.38	0.019631
126.0	0.116627D+01	0.564993D+00	25.85	1.679398	126.0	-0.136169D+00	0.330032D+01	166.38	0.019631	127.0	-0.148235D+00	-0.204198D+01	-172.16	0.022391
127.0	0.123506D+01	0.546880D+00	23.88	1.824445	127.0	-0.148235D+00	-0.204198D+01	-172.16	0.022391	128.0	-0.159483D+00	-0.776318D+01	-154.77	0.031462
128.0	0.130039D+01	0.528420D+00	22.11	1.970249	128.0	-0.159483D+00	-0.776318D+01	-154.77	0.031462	129.0	-0.169837D+00	-0.138616D+00	-140.78	0.048059
129.0	0.136198D+01	0.509684D+00	20.52	2.114779	129.0	-0.169837D+00	-0.138616D+00	-140.78	0.048059	130.0	-0.179222D+00	-0.203343D+00	-131.39	0.073469
130.0	0.141956D+01	0.490740D+00	19.07	2.255967	130.0	-0.179222D+00	-0.203343D+00	-131.39	0.073469	131.0	-0.187569D+00	-0.271768D+00	-124.51	0.109040
131.0	0.147285D+01	0.471655D+00	17.76	2.391753	131.0	-0.187569D+00	-0.271768D+00	-124.51	0.109040	132.0	-0.194816D+00	-0.343822D+00	-119.54	0.156174
132.0	0.152163D+01	0.452494D+00	16.56	2.520113	132.0	-0.194816D+00	-0.343822D+00	-119.54	0.156174	133.0	-0.200904D+00	-0.419461D+00	-115.59	0.216310
133.0	0.156567D+01	0.433318D+00	15.47	2.639099	133.0	-0.200904D+00	-0.419461D+00	-115.59	0.216310	134.0	-0.205780D+00	-0.498564D+00	-112.43	0.290917
134.0	0.161478D+01	0.414189D+00	14.47	2.748875	134.0	-0.205780D+00	-0.498564D+00	-112.43	0.290917	135.0	-0.209399D+00	-0.571844D+00	-109.82	0.381471
135.0	0.163878D+01	0.395164D+00	13.56	2.847751	135.0	-0.209399D+00	-0.571844D+00	-109.82	0.381471					

CIRCULAR PP POLARIZATION				CIRCULAR OP POLARIZATION				CIRCULAR OP POLARIZATION				CIRCULAR OP POLARIZATION			
THETA	REAL	IMAG	PHASE	THETA	REAL	IMAG	PHASE	THETA	REAL	IMAG	PHASE	THETA	REAL	IMAG	PHASE
0.0	0.934424D+00	0.543773D+00	30.20	0.0	0.185398D-11	-0.284418D-11	-55.90	0.0	0.185398D-11	-0.284418D-11	-55.90	0.0	0.185398D-11	-0.284418D-11	-55.90
1.0	0.934396D+00	0.543821D+00	30.20	1.0	0.142189D-03	-0.175871D-03	-51.04	1.0	0.142189D-03	-0.175871D-03	-51.04	1.0	0.142189D-03	-0.175871D-03	-51.04
2.0	0.934312D+00	0.543961D+00	30.21	2.0	0.568157D-02	-0.701391D-02	-50.99	2.0	0.568157D-02	-0.701391D-02	-50.99	2.0	0.568157D-02	-0.701391D-02	-50.99
3.0	0.934178D+00	0.544182D+00	30.22	3.0	0.127607D-02	-0.157026D-02	-50.90	3.0	0.127607D-02	-0.157026D-02	-50.90	3.0	0.127607D-02	-0.157026D-02	-50.90
4.0	0.933980D+00	0.544466D+00	30.24	4.0	0.226286D-02	-0.277204D-02	-50.77	4.0	0.226286D-02	-0.277204D-02	-50.77	4.0	0.226286D-02	-0.277204D-02	-50.77
5.0	0.933733D+00	0.544787D+00	30.26	5.0	0.352420D-02	-0.429236D-02	-50.61	5.0	0.352420D-02	-0.429236D-02	-50.61	5.0	0.352420D-02	-0.429236D-02	-50.61
6.0	0.933433D+00	0.545115D+00	30.28	6.0	0.505454D-02	-0.611256D-02	-50.41	6.0	0.505454D-02	-0.611256D-02	-50.41	6.0	0.505454D-02	-0.611256D-02	-50.41
7.0	0.933082D+00	0.545411D+00	30.31	7.0	0.684701D-02	-0.821086D-02	-50.18	7.0	0.684701D-02	-0.821086D-02	-50.18	7.0	0.684701D-02	-0.821086D-02	-50.18
8.0	0.932681D+00	0.545629D+00	30.33	8.0	0.889343D-02	-0.105616D-01	-49.90	8.0	0.889343D-02	-0.105616D-01	-49.90	8.0	0.889343D-02	-0.105616D-01	-49.90
9.0	0.932232D+00	0.545720D+00	30.34	9.0	0.111843D-01	-0.131359D-01	-49.59	9.0	0.111843D-01	-0.131359D-01	-49.59	9.0	0.111843D-01	-0.131359D-01	-49.59
10.0	0.931737D+00	0.545627D+00	30.35	10.0	0.137088D-01	-0.159021D-01	-49.24	10.0	0.137088D-01	-0.159021D-01	-49.24	10.0	0.137088D-01	-0.159021D-01	-49.24
11.0	0.931200D+00	0.545289D+00	30.35	11.0	0.164456D-01	-0.188256D-01	-48.84	11.0	0.164456D-01	-0.188256D-01	-48.84	11.0	0.164456D-01	-0.188256D-01	-48.84
12.0	0.930623D+00	0.544681D+00	30.34	12.0	0.194081D-01	-0.218637D-01	-48.41	12.0	0.194081D-01	-0.218637D-01	-48.41	12.0	0.194081D-01	-0.218637D-01	-48.41
13.0	0.930010D+00	0.543612D+00	30.31	13.0	0.225541D-01	-0.249937D-01	-47.94	13.0	0.225541D-01	-0.249937D-01	-47.94	13.0	0.225541D-01	-0.249937D-01	-47.94
14.0	0.929365D+00	0.542129D+00	30.26	14.0	0.258761D-01	-0.281634D-01	-47.42	14.0	0.258761D-01	-0.281634D-01	-47.42	14.0	0.258761D-01	-0.281634D-01	-47.42
15.0	0.928692D+00	0.540117D+00	30.18	15.0	0.293561D-01	-0.313313D-01	-46.85	15.0	0.293561D-01	-0.313313D-01	-46.85	15.0	0.293561D-01	-0.313313D-01	-46.85
16.0	0.927997D+00	0.537496D+00	30.08	16.0	0.329745D-01	-0.344572D-01	-46.26	16.0	0.329745D-01	-0.344572D-01	-46.26	16.0	0.329745D-01	-0.344572D-01	-46.26
17.0	0.927283D+00	0.534187D+00	29.95	17.0	0.367108D-01	-0.374988D-01	-45.61	17.0	0.367108D-01	-0.374988D-01	-45.61	17.0	0.367108D-01	-0.374988D-01	-45.61
18.0	0.926557D+00	0.530110D+00	29.78	18.0	0.405413D-01	-0.404138D-01	-44.91	18.0	0.405413D-01	-0.404138D-01	-44.91	18.0	0.405413D-01	-0.404138D-01	-44.91
19.0	0.925822D+00	0.525183D+00	29.56	19.0	0.444434D-01	-0.431604D-01	-44.16	19.0	0.444434D-01	-0.431604D-01	-44.16	19.0	0.444434D-01	-0.431604D-01	-44.16
20.0	0.925093D+00	0.519326D+00	29.31	20.0	0.483918D-01	-0.456982D-01	-43.36	20.0	0.483918D-01	-0.456982D-01	-43.36	20.0	0.483918D-01	-0.456982D-01	-43.36
21.0	0.924367D+00	0.512460D+00	29.09	21.0	0.523587D-01	-0.479979D-01	-42.51	21.0	0.523587D-01	-0.479979D-01	-42.51	21.0	0.523587D-01	-0.479979D-01	-42.51
22.0	0.923648D+00	0.504508D+00	28.84	22.0	0.563176D-01	-0.499923D-01	-41.59	22.0	0.563176D-01	-0.499923D-01	-41.59	22.0	0.563176D-01	-0.499923D-01	-41.59
23.0	0.922960D+00	0.495394D+00	28.56	23.0	0.602389D-01	-0.516767D-01	-40.63	23.0	0.602389D-01	-0.516767D-01	-40.63	23.0	0.602389D-01	-0.516767D-01	-40.63
24.0	0.922292D+00	0.485086D+00	28.24	24.0	0.640927D-01	-0.530089D-01	-39.59	24.0	0.640927D-01	-0.530089D-01	-39.59	24.0	0.640927D-01	-0.530089D-01	-39.59
25.0	0.921655D+00	0.473403D+00	27.91	25.0	0.678478D-01	-0.539600D-01	-38.50	25.0	0.678478D-01	-0.539600D-01	-38.50	25.0	0.678478D-01	-0.539600D-01	-38.50
26.0	0.921055D+00	0.460396D+00	26.56	26.0	0.714724D-01	-0.545087D-01	-37.33	26.0	0.714724D-01	-0.545087D-01	-37.33	26.0	0.714724D-01	-0.545087D-01	-37.33
27.0	0.920498D+00	0.445972D+00	25.85	27.0	0.749341D-01	-0.546216D-01	-36.09	27.0	0.749341D-01	-0.546216D-01	-36.09	27.0	0.749341D-01	-0.546216D-01	-36.09
28.0	0.919986D+00	0.430078D+00	25.06	28.0	0.781998D-01	-0.542932D-01	-34.77	28.0	0.781998D-01	-0.542932D-01	-34.77	28.0	0.781998D-01	-0.542932D-01	-34.77
29.0	0.919524D+00	0.412671D+00	24.17	29.0	0.812365D-01	-0.535067D-01	-33.37	29.0	0.812365D-01	-0.535067D-01	-33.37	29.0	0.812365D-01	-0.535067D-01	-33.37
30.0	0.919112D+00	0.393714D+00	23.19	30.0	0.840107D-01	-0.522539D-01	-31.88	30.0	0.840107D-01	-0.522539D-01	-31.88	30.0	0.840107D-01	-0.522539D-01	-31.88
31.0	0.918751D+00	0.373178D+00	22.11	31.0	0.864895D-01	-0.505317D-01	-30.30	31.0	0.864895D-01	-0.505317D-01	-30.30	31.0	0.864895D-01	-0.505317D-01	-30.30
32.0	0.918439D+00	0.351043D+00	20.92	32.0	0.886401D-01	-0.483418D-01	-28.61	32.0	0.886401D-01	-0.483418D-01	-28.61	32.0	0.886401D-01	-0.483418D-01	-28.61
33.0	0.918172D+00	0.327297D+00	19.62	33.0	0.904305D-01	-0.456912D-01	-26.81	33.0	0.904305D-01	-0.456912D-01	-26.81	33.0	0.904305D-01	-0.456912D-01	-26.81
34.0	0.917943D+00	0.301937D+00	18.21	34.0	0.918298D-01	-0.425922D-01	-24.88	34.0	0.918298D-01	-0.425922D-01	-24.88	34.0	0.918298D-01	-0.425922D-01	-24.88
35.0	0.917744D+00	0.274969D+00	16.68	35.0	0.928082D-01	-0.390621D-01	-22.62	35.0	0.928082D-01	-0.390621D-01	-22.62	35.0	0.928082D-01	-0.390621D-01	-22.62
36.0	0.917562D+00	0.246410D+00	15.03	36.0	0.933374D-01	-0.351237D-01	-20.62	36.0	0.933374D-01	-0.351237D-01	-20.62	36.0	0.933374D-01	-0.351237D-01	-20.62
37.0	0.917381D+00	0.216286D+00	13.27	37.0	0.933910D-01	-0.308048D-01	-18.26	37.0	0.933910D-01	-0.308048D-01	-18.26	37.0	0.933910D-01	-0.308048D-01	-18.26
38.0	0.917182D+00	0.184635D+00	11.38	38.0	0.929448D-01	-0.261367D-01	-15.71	38.0	0.929448D-01	-0.261367D-01	-15.71	38.0	0.929448D-01	-0.261367D-01	-15.71
39.0	0.916943D+00	0.151503D+00	9.34	39.0	0.919769D-01	-0.211617D-01	-12.96	39.0	0.919769D-01	-0.211617D-01	-12.96	39.0	0.919769D-01	-0.211617D-01	-12.96
40.0	0.916635D+00	0.116947D+00	7.27	40.0	0.904682D-01	-0.159173D-01	-9.96	40.0	0.904682D-01	-0.159173D-01	-9.96	40.0	0.904682D-01	-0.159173D-01	-9.96
41.0	0.916227D+00	0.081035D+00	5.05	41.0	0.884026D-01	-0.104516D-01	-6.74	41.0	0.884026D-01	-0.104516D-01	-6.74	41.0	0.884026D-01	-0.104516D-01	-6.74
42.0	0.915862D+00	0.048450D+00	2.74	42.0	0.857675D-01	-0.0481504D-02	-3.21	42.0	0.857675D-01	-0.0481504D-02	-3.21	42.0	0.857675D-01	-0.0481504D-02	-3.21
43.0	0.914959D+00	0.048360D-02	0.34	43.0	0.825536D-01	0.938400D-03	0.65	43.0	0.825536D-01	0.938400D-03	0.65	43.0	0.825536D-01	0.938400D-03	0.65
44.0	0.914011D+00	-0.340114D-01	-2.13	44.0	0.787566D-01	0.675159D-02	4.90	44.0	0.787566D-01	0.675159D-02	4.90	44.0	0.787566D-01	0.675159D-02	4.90
45.0	0.912788D+00	-0.744730D-01	-4.66	45.0	0.743723D-01	0.125648D-01	9.59	45.0	0.743723D-01	0.125648D-01	9.59	45.0	0.743723D-01	0.125648D-01	9.59

CIRCULAR PP POLARIZATION KA= 5.000					CIRCULAR OP POLARIZATION KA= 5.000				
THETA	REAL	IMAG	PHASE	NRCS	THETA	REAL	IMAG	PHASE	NRCS
45.0	0.912788D+00	-0.744730D-01	-4.86	0.838729	45.0	0.743723D-01	0.125648D-01	9.59	0.005689
46.0	0.911232D+00	-0.115805D+00	-7.24	0.843754	46.0	0.694067D-01	0.133360D-01	14.78	0.005153
47.0	0.909280D+00	-0.157884D+00	-9.85	0.851717	47.0	0.638648D-01	0.239473D-01	20.55	0.004652
48.0	0.906865D+00	-0.200576D+00	-12.47	0.862635	48.0	0.577638D-01	0.293778D-01	26.96	0.004200
49.0	0.903915D+00	-0.243741D+00	-15.09	0.876872	49.0	0.511148D-01	0.345590D-01	34.06	0.003807
50.0	0.900351D+00	-0.287232D+00	-17.69	0.893134	50.0	0.439422D-01	0.394209D-01	41.90	0.003485
51.0	0.896092D+00	-0.330895D+00	-20.27	0.912471	51.0	0.362723D-01	0.438998D-01	50.43	0.003243
52.0	0.891049D+00	-0.374571D+00	-22.80	0.934271	52.0	0.281368D-01	0.479336D-01	59.59	0.003089
53.0	0.885131D+00	-0.418096D+00	-25.28	0.958261	53.0	0.195720D-01	0.514626D-01	69.18	0.003031
54.0	0.878242D+00	-0.461303D+00	-27.71	0.984110	54.0	0.106193D-01	0.544298D-01	78.96	0.003075
55.0	0.870285D+00	-0.504019D+00	-30.08	1.011431	55.0	0.132450D-02	0.567820D-01	88.66	0.003226
56.0	0.861158D+00	-0.546073D+00	-32.38	1.039786	56.0	-0.026187D-02	0.584703D-01	98.04	0.003487
57.0	0.850753D+00	-0.587289D+00	-34.62	1.068690	57.0	-0.180851D-01	0.594510D-01	106.42	0.003861
58.0	0.839700D+00	-0.627493D+00	-36.79	1.097618	58.0	-0.280864D-01	0.598855D-01	115.20	0.004351
59.0	0.827970D+00	-0.666510D+00	-38.91	1.126019	59.0	-0.382032D-01	0.591416D-01	122.06	0.004957
60.0	0.810841D+00	-0.704168D+00	-40.97	1.153216	60.0	-0.482469D-01	0.577941D-01	129.93	0.005680
61.0	0.794284D+00	-0.740297D+00	-42.99	1.178927	61.0	-0.585173D-01	0.556247D-01	136.45	0.006518
62.0	0.775929D+00	-0.774730D+00	-44.96	1.202273	62.0	-0.685745D-01	0.526232D-01	142.50	0.007472
63.0	0.755676D+00	-0.807308D+00	-46.89	1.222790	63.0	-0.784679D-01	0.487875D-01	148.13	0.008537
64.0	0.733430D+00	-0.837868D+00	-48.80	1.239433	64.0	-0.881228D-01	0.441239D-01	153.40	0.009713
65.0	0.709102D+00	-0.866267D+00	-50.70	1.253243	65.0	-0.974634D-01	0.386476D-01	158.37	0.010993
66.0	0.682609D+00	-0.892359D+00	-52.59	1.262259	66.0	-0.106414D+00	0.323836D-01	163.07	0.012373
67.0	0.653876D+00	-0.916010D+00	-54.48	1.266629	67.0	-0.118898D+00	0.253648D-01	167.55	0.013845
68.0	0.622838D+00	-0.937096D+00	-56.39	1.266076	68.0	-0.122841D+00	0.176347D-01	171.83	0.015401
69.0	0.589838D+00	-0.955502D+00	-58.33	1.260421	69.0	-0.130163D+00	0.924529D-02	175.94	0.017030
70.0	0.553635D+00	-0.971122D+00	-60.31	1.249569	70.0	-0.136813D+00	0.258321D-03	179.89	0.018718
71.0	0.515397D+00	-0.983863D+00	-62.35	1.233621	71.0	-0.142702D+00	0.925563D-02	176.29	0.020450
72.0	0.474708D+00	-0.993645D+00	-64.46	1.212679	72.0	-0.147774D+00	-0.192171D-01	172.59	0.022206
73.0	0.431567D+00	-0.100040D+01	-66.66	1.187049	73.0	-0.151967D+00	-0.295344D-01	169.90	0.023967
74.0	0.385990D+00	-0.100407D+01	-68.97	1.157446	74.0	-0.155227D+00	-0.401234D-01	165.51	0.025705
75.0	0.338009D+00	-0.100462D+01	-71.40	1.123505	75.0	-0.157504D+00	-0.508690D-01	162.10	0.027395
76.0	0.287678D+00	-0.100204D+01	-73.98	1.086782	76.0	-0.158753D+00	-0.616650D-01	158.77	0.029005
77.0	0.235066D+00	-0.996236D+00	-76.72	1.047743	77.0	-0.158939D+00	-0.723952D-01	155.51	0.030503
78.0	0.180266D+00	-0.987297D+00	-79.65	1.007251	78.0	-0.158032D+00	-0.829380D-01	152.31	0.031853
79.0	0.123390D+00	-0.975207D+00	-82.79	0.966254	79.0	-0.156099D+00	-0.931676D-01	149.15	0.033019
80.0	0.645723D-01	-0.959997D+00	-86.15	0.925763	80.0	-0.152858D+00	-0.119555D+00	146.04	0.033965
81.0	0.396903D-02	-0.941710D+00	-89.76	0.886633	81.0	-0.148372D+00	-0.112467D+00	142.95	0.034656
82.0	-0.582419D-01	-0.920404D+00	-93.62	0.850536	82.0	-0.143155D+00	-0.120674D+00	139.87	0.035056
83.0	-0.121860D+00	-0.896154D+00	-97.74	0.817842	83.0	-0.136628D+00	-0.128346D+00	136.79	0.035137
84.0	-0.186664D+00	-0.869045D+00	-102.12	0.790082	84.0	-0.129002D+00	-0.135021D+00	133.69	0.034874
85.0	-0.252409D+00	-0.839177D+00	-106.74	0.767928	85.0	-0.120314D+00	-0.140617D+00	130.55	0.034248
86.0	-0.318831D+00	-0.806662D+00	-111.57	0.752357	86.0	-0.110604D+00	-0.144977D+00	127.34	0.033251
87.0	-0.385644D+00	-0.771627D+00	-116.55	0.744429	87.0	-0.995232D-01	-0.147987D+00	124.03	0.031885
88.0	-0.452543D+00	-0.734207D+00	-121.65	0.743856	88.0	-0.683309D-01	-0.159532D+00	120.57	0.030162
89.0	-0.519207D+00	-0.694551D+00	-126.73	0.751977	89.0	-0.758958D-01	-0.149505D+00	116.91	0.028112
90.0	-0.585295D+00	-0.652816D+00	-131.88	0.768740	90.0	-0.626949D-01	-0.147808D+00	112.98	0.025778

CIRCULAR PP POLARIZATION KA= 5.000					CIRCULAR OP POLARIZATION KA= 5.000				
THETA	REAL	IMAG	PHASE	NRCS	THETA	REAL	IMAG	PHASE	NRCS
90.0	-0.585295D+00	-0.652816D+00	-131.88	0.768740	90.0	-0.626949D-01	-0.147808D+00	-112.98	0.025778
91.0	-0.650453D+00	0.609171D+00	-136.68	0.794718	91.0	-0.488136D-01	-0.144353D+00	-108.43	0.023220
92.0	-0.714312D+00	-0.563791D+00	-141.72	0.828102	92.0	-0.343447D-01	-0.139063D+00	-103.87	0.020518
93.0	-0.776494D+00	-0.516859D+00	-146.35	0.870086	93.0	-0.193883D-01	-0.131876D+00	-98.36	0.017767
94.0	-0.836611D+00	-0.468566D+00	-150.75	0.919771	94.0	-0.405075D-02	-0.122742D+00	-91.89	0.015082
95.0	-0.894267D+00	-0.419106D+00	-154.89	0.975364	95.0	0.115561D-01	-0.111627D+00	-84.09	0.012594
96.0	-0.949065D+00	-0.368681D+00	-158.77	1.036651	96.0	0.273755D-01	-0.985135D-01	-74.50	0.010351
97.0	-0.100061D+01	-0.317494D+00	-162.40	1.102014	97.0	0.431067D-01	-0.834019D-01	-62.67	0.008514
98.0	-0.104849D+01	-0.265750D+00	-165.78	1.169956	98.0	0.588063D-01	-0.663100D-01	-48.43	0.007855
99.0	-0.109233D+01	-0.213655D+00	-168.93	1.238831	99.0	0.742888D-01	-0.472749D-01	-32.47	0.007754
100.0	-0.113174D+01	-0.161417D+00	-171.68	1.306881	100.0	0.894278D-01	-0.263536D-01	-16.42	0.008692
101.0	-0.116634D+01	-0.109242D+00	-174.65	1.372279	101.0	0.104097D+00	-0.362333D-02	-1.99	0.010849
102.0	-0.119578D+01	-0.573330D-01	-177.25	1.433177	102.0	0.118172D+00	0.208117D-01	9.99	0.014398
103.0	-0.121972D+01	-0.588984D-02	-179.72	1.487754	103.0	0.131530D+00	0.468512D-01	19.61	0.019495
104.0	-0.123784D+01	0.448913D-01	177.92	1.534274	104.0	0.144053D+00	0.743362D-01	27.30	0.026277
105.0	-0.124986D+01	0.948193D-01	175.66	1.571136	105.0	0.155626D+00	0.103112D+00	33.53	0.034852
106.0	-0.125550D+01	0.143712D+00	173.47	1.596926	106.0	0.166142D+00	0.132966D+00	38.68	0.045291
107.0	-0.125453D+01	0.151391D+00	171.33	1.610475	107.0	0.175499D+00	0.163785D+00	43.02	0.057625
108.0	-0.124676D+01	0.237688D+00	169.21	1.610901	108.0	0.183604D+00	0.195257D+00	46.76	0.071836
109.0	-0.123202D+01	0.282443D+00	167.00	1.597652	109.0	0.190374D+00	0.227168D+00	50.04	0.087848
110.0	-0.121020D+01	0.325507D+00	164.95	1.570543	110.0	0.195733D+00	0.259259D+00	52.95	0.105527
111.0	-0.118122D+01	0.366741D+00	162.75	1.529778	111.0	0.199619D+00	0.291251D+00	55.57	0.128675
112.0	-0.114504D+01	0.406017D+00	160.45	1.475974	112.0	0.201981D+00	0.322868D+00	57.97	0.145037
113.0	-0.110169D+01	0.443217D+00	158.08	1.410158	113.0	0.202778D+00	0.353742D+00	60.18	0.166252
114.0	-0.105122D+01	0.478233D+00	155.54	1.333768	114.0	0.201984D+00	0.383608D+00	62.23	0.187953
115.0	-0.993741D+00	0.510589D+00	152.79	1.248631	115.0	0.199587D+00	0.412112D+00	64.16	0.209672
116.0	-0.929426D+00	0.541389D+00	149.78	1.156934	116.0	0.195588D+00	0.438909D+00	65.98	0.230896
117.0	-0.858484D+00	0.569373D+00	146.45	1.061181	117.0	0.190002D+00	0.463645D+00	67.72	0.251067
118.0	-0.781181D+00	0.594869D+00	142.71	0.964137	118.0	0.182858D+00	0.485961D+00	69.38	0.269596
119.0	-0.697833D+00	0.617897D+00	138.48	0.868768	119.0	0.174200D+00	0.505495D+00	70.99	0.285871
120.0	-0.608604D+00	0.638377D+00	133.64	0.778160	120.0	0.164085D+00	0.521882D+00	72.55	0.299284
121.0	-0.514509D+00	0.656297D+00	128.09	0.695445	121.0	0.152585D+00	0.534757D+00	74.07	0.309247
122.0	-0.415408D+00	0.671675D+00	121.74	0.623711	122.0	0.139786D+00	0.543761D+00	75.58	0.315216
123.0	-0.312004D+00	0.684517D+00	114.50	0.565910	123.0	0.125785D+00	0.548539D+00	77.08	0.316717
124.0	-0.204843D+00	0.694848D+00	106.43	0.524775	124.0	0.110693D+00	0.548745D+00	78.60	0.313374
125.0	-0.945101D-01	0.702704D+00	97.66	0.502725	125.0	0.946305D-01	0.544043D+00	80.13	0.304937
126.0	0.183773D-01	0.708131D+00	68.51	0.501788	126.0	0.777306D-01	0.534111D+00	81.72	0.291317
127.0	0.133170D+00	0.711189D+00	75.39	0.523524	127.0	0.601349D-01	0.518644D+00	83.39	0.272608
128.0	0.249193D+00	0.711945D+00	70.71	0.568963	128.0	0.419934D-01	0.497353D+00	85.17	0.249124
129.0	0.365749D+00	0.710477D+00	62.76	0.638550	129.0	0.234623D-01	0.469974D+00	87.14	0.221426
130.0	0.482127D+00	0.706870D+00	55.70	0.732113	130.0	0.470736D-02	0.456261D+00	89.38	0.190346
131.0	0.597605D+00	0.701220D+00	49.56	0.848880	131.0	-0.141071D-01	0.396000D+00	92.04	0.157015
132.0	0.711451D+00	0.693627D+00	44.27	0.967280	132.0	-0.328101D-01	0.349000D+00	95.37	0.122877
133.0	0.822941D+00	0.684197D+00	37.78	1.142358	133.0	-0.512302D-01	0.295101D+00	99.85	0.089709
134.0	0.931354D+00	0.673046D+00	35.85	1.320411	134.0	-0.691963D-01	0.234178D+00	106.46	0.059628
135.0	0.103598D+01	0.660288D+00	32.51	1.509243	135.0	-0.865393D-01	0.166137D+00	117.51	0.035091

CIRCULAR PP POLARIZATION KA= 5.000					CIRCULAR CP POLARIZATION KA= 5.000				
THETA	REAL	IMAG	PHASE	MCS	THETA	REAL	IMAG	PHASE	MCS
135.0	0.103598D+01	0.660288D+00	32.51	1.509243	135.0	-0.865393D-01	0.166137D+00	117.51	0.035091
136.0	0.113616D+01	0.640607D+00	29.52	1.706194	136.0	-0.010309D+00	0.909192D-01	138.49	0.018895
137.0	0.123117D+01	0.630445D+00	27.52	1.913229	137.0	-0.118698D+00	0.850419D-02	175.30	0.018161
138.0	0.132042D+01	0.613558D+00	24.52	2.120024	138.0	-0.133199D+00	-0.810912D-01	-148.57	0.024318
139.0	0.140332D+01	0.595649D+00	23.50	2.324131	139.0	-0.146450D+00	-0.777811D+00	-129.48	0.053064
140.0	0.147931D+01	0.576351D+00	21.30	2.570994	140.0	-0.158316D+00	-0.281559D+00	-119.35	0.104340
141.0	0.154789D+01	0.556961D+00	19.79	2.766169	141.0	-0.168671D+00	-0.392200D+00	-113.27	0.182271
142.0	0.160861D+01	0.536455D+00	18.58	2.875398	142.0	-0.177402D+00	-0.509556D+00	-109.20	0.291119
143.0	0.166107D+01	0.515385D+00	17.24	3.026737	143.0	-0.184411D+00	-0.633410D+00	-106.23	0.435216
144.0	0.170495D+01	0.493750D+00	16.15	3.150665	144.0	-0.189613D+00	-0.763504D+00	-103.95	0.618892
145.0	0.174000D+01	0.471170D+00	15.17	3.250184	145.0	-0.192939D+00	-0.899541D+00	-102.11	0.846339
146.0	0.176601D+01	0.449578D+00	14.28	3.320907	146.0	-0.194337D+00	-0.104118D+01	-100.57	1.121827
147.0	0.178286D+01	0.427223D+00	13.56	3.361120	147.0	-0.193772D+00	-0.118805D+01	-99.26	1.449018
148.0	0.179052D+01	0.404830D+00	12.74	3.369836	148.0	-0.191226D+00	-0.133974D+01	-98.12	1.831475
149.0	0.178900D+01	0.382490D+00	12.07	3.346817	149.0	-0.186701D+00	-0.149580D+01	-97.11	2.272275
150.0	0.177841D+01	0.360320D+00	11.45	3.292251	150.0	-0.180218D+00	-0.165575D+01	-96.21	2.773976
151.0	0.175894D+01	0.338385D+00	10.89	3.208377	151.0	-0.171803D+00	-0.181907D+01	-95.40	3.338535
152.0	0.173084D+01	0.316774D+00	10.37	3.096152	152.0	-0.161528D+00	-0.198523D+01	-94.65	3.967221
153.0	0.169448D+01	0.295562D+00	9.85	2.958482	153.0	-0.149449D+00	-0.215365D+01	-93.97	4.660507
154.0	0.165014D+01	0.274819D+00	9.36	2.798489	154.0	-0.135669D+00	-0.232375D+01	-93.34	5.418202
155.0	0.159841D+01	0.254607D+00	9.05	2.619751	155.0	-0.120290D+00	-0.249496D+01	-92.76	6.238995
156.0	0.153979D+01	0.234982D+00	8.68	2.426181	156.0	-0.103434D+00	-0.266648D+01	-92.22	7.120811
157.0	0.147486D+01	0.215995D+00	8.33	2.221912	157.0	-0.852386D-01	-0.283788D+01	-91.72	8.060589
158.0	0.140431D+01	0.197690D+00	8.01	2.011171	158.0	-0.658540D-01	-0.300832D+01	-91.25	9.054303
159.0	0.132880D+01	0.180105D+00	7.72	1.799151	159.0	-0.454425D-01	-0.317725D+01	-90.82	10.086967
160.0	0.124909D+01	0.163272D+00	7.45	1.586888	160.0	-0.241773D-01	-0.334396D+01	-90.41	11.182655
161.0	0.116597D+01	0.147219D+00	7.20	1.381149	161.0	-0.224054D-02	-0.350778D+01	-90.04	12.304539
162.0	0.108028D+01	0.131966D+00	6.96	1.184325	162.0	0.201782D-01	-0.366804D+01	-89.68	13.454944
163.0	0.992740D+00	0.117533D+00	6.75	0.995346	163.0	0.428837D-01	-0.382408D+01	-89.36	14.625422
164.0	0.904329D+00	0.103932D+00	6.56	0.828812	164.0	0.656769D-01	-0.397524D+01	-89.05	15.806836
165.0	0.815863D+00	0.911718D-01	6.38	0.673945	165.0	0.883568D-01	-0.412088D+01	-88.77	16.989471
166.0	0.728203D+00	0.792585D-01	6.21	0.536561	166.0	0.110722D+00	-0.426039D+01	-88.51	18.163146
167.0	0.642198D+00	0.681947D-01	6.06	0.417069	167.0	0.132578D+00	-0.439315D+01	-88.27	19.317351
168.0	0.558685D+00	0.579805D-01	5.92	0.317500	168.0	0.153716D+00	-0.451860D+01	-88.05	20.441380
169.0	0.478472D+00	0.486139D-01	5.80	0.237500	169.0	0.173960D+00	-0.463619D+01	-87.85	21.524866
170.0	0.402339D+00	0.400912D-01	5.69	0.175000	170.0	0.193122D+00	-0.474539D+01	-87.67	22.556031
171.0	0.331025D+00	0.324072D-01	5.59	0.125000	171.0	0.211029D+00	-0.484573D+01	-87.51	23.525640
172.0	0.265220D+00	0.255560D-01	5.50	0.075000	172.0	0.227520D+00	-0.493367D+01	-87.36	24.423361
173.0	0.205565D+00	0.195312D-01	5.43	0.042638	173.0	0.242444D+00	-0.501807D+01	-87.23	25.239811
174.0	0.152637D+00	0.143263D-01	5.36	0.023503	174.0	0.255666D+00	-0.509830D+01	-87.12	25.966325
175.0	0.106955D+00	0.993473D-02	5.31	0.011537	175.0	0.267065D+00	-0.515012D+01	-87.03	26.595090
176.0	0.689517D-01	0.635067D-02	5.26	0.004795	176.0	0.276537D+00	-0.520027D+01	-86.96	27.119270
177.0	0.390064D-01	0.356888D-02	5.23	0.001534	177.0	0.283995D+00	-0.523551D+01	-86.90	27.533114
178.0	0.174066D-01	0.158508D-02	5.20	0.000306	178.0	0.289372D+00	-0.526767D+01	-86.86	27.832049
179.0	0.436226D-02	0.396105D-03	5.19	0.000019	179.0	0.292618D+00	-0.528461D+01	-86.83	28.012751
180.0	0.270578D-10	-0.417318D-10	-57.04	0.000000	180.0	0.293703D+00	-0.529027D+01	-86.82	28.073213

CIRCULAR PP POLARIZATION KA= 6.000

THETA	REAL	IMAG	PHASE	NBCS	THETA	REAL	IMAG	PHASE	NBCS
45.0	-0.138267D+00	0.102610D+01	97.67	1.072001	45.0	-0.584588D-02	-0.427977D-01	-97.25	0.001861
46.0	-0.104755D+00	0.103891D+01	95.76	1.090307	46.0	0.227936D-02	-0.467265D-01	-87.21	0.032189
47.0	-0.707647D-01	0.104969D+01	93.86	1.106865	47.0	0.102761D-01	-0.500790D-01	-78.40	0.002614
48.0	-0.362869D-01	0.105824D+01	91.96	1.121198	48.0	0.184774D-01	-0.527960D-01	-70.71	0.003129
49.0	-0.131404D-02	0.106436D+01	90.07	1.132863	49.0	0.268104D-01	-0.548258D-01	-63.94	0.003725
50.0	0.341607D-01	0.106785D+01	88.17	1.141661	50.0	0.351971D-01	-0.561248D-01	-57.91	0.004389
51.0	0.701417D-01	0.106852D+01	86.24	1.146655	51.0	0.435554D-01	-0.566584D-01	-52.45	0.005107
52.0	0.106630D+00	0.106621D+01	84.29	1.148181	52.0	0.517990D-01	-0.564018D-01	-47.44	0.005864
53.0	0.143623D+00	0.106077D+01	82.29	1.145859	53.0	0.598390D-01	-0.553410D-01	-42.76	0.006643
54.0	0.181112D+00	0.105205D+01	80.23	1.139609	54.0	0.675841D-01	-0.534728D-01	-38.35	0.007427
55.0	0.219082D+00	0.103993D+01	78.10	1.129655	55.0	0.749423D-01	-0.508059D-01	-34.13	0.008198
56.0	0.257509D+00	0.102432D+01	75.89	1.115536	56.0	0.818213D-01	-0.473608D-01	-30.06	0.008938
57.0	0.296363D+00	0.100512D+01	73.57	1.098103	57.0	0.881300D-01	-0.431695D-01	-26.10	0.009631
58.0	0.335600D+00	0.982224D+00	71.14	1.077528	58.0	0.937792D-01	-0.382799D-01	-22.20	0.010260
59.0	0.375167D+00	0.955795D+00	68.57	1.054295	59.0	0.986833D-01	-0.327412D-01	-18.35	0.010810
60.0	0.414988D+00	0.925619D+00	65.85	1.028935	60.0	0.102761D+00	-0.266279D-01	-14.53	0.011269
61.0	0.455014D+00	0.891782D+00	62.97	1.002313	61.0	0.105935D+00	-0.200171D-01	-10.70	0.011623
62.0	0.495120D+00	0.854328D+00	59.91	0.975019	62.0	0.108140D+00	-0.129983D-01	-6.85	0.011863
63.0	0.535206D+00	0.813325D+00	56.65	0.947944	63.0	0.109311D+00	-0.567081D-02	-2.97	0.011981
64.0	0.575147D+00	0.768872D+00	53.20	0.921954	64.0	0.109398D+00	0.185778D-02	0.57	0.011971
65.0	0.614800D+00	0.721093D+00	49.55	0.897954	65.0	0.108358D+00	0.947228D-02	5.00	0.011831
66.0	0.654005D+00	0.670138D+00	45.70	0.876808	66.0	0.106158D+00	0.170518D-01	9.13	0.011560
67.0	0.692586D+00	0.616183D+00	41.66	0.859557	67.0	0.102780D+00	0.244691D-01	13.39	0.011163
68.0	0.730348D+00	0.559432D+00	37.45	0.846372	68.0	0.982170D-01	0.315963D-01	17.83	0.010845
69.0	0.767060D+00	0.500111D+00	33.10	0.838522	69.0	0.924707D-01	0.343023D-01	22.50	0.010618
70.0	0.802554D+00	0.438471D+00	28.65	0.836350	70.0	0.855631D-01	0.444565D-01	27.46	0.009297
71.0	0.836529D+00	0.374784D+00	24.13	0.840245	71.0	0.775254D-01	0.499319D-01	32.78	0.008503
72.0	0.868746D+00	0.309343D+00	19.60	0.850413	72.0	0.684041D-01	0.546032D-01	38.60	0.007661
73.0	0.898936D+00	0.242459D+00	15.09	0.866872	73.0	0.582590D-01	0.583525D-01	45.05	0.006799
74.0	0.926817D+00	0.174460D+00	10.66	0.889425	74.0	0.471640D-01	0.610697D-01	52.32	0.005954
75.0	0.952098D+00	0.105690D+00	6.33	0.917660	75.0	0.352060D-01	0.626541D-01	60.67	0.005165
76.0	0.974482D+00	0.365013D-01	2.15	0.950948	76.0	0.224848D-01	0.630170D-01	70.36	0.004477
77.0	0.993668D+00	-0.327403D-01	-1.89	0.984449	77.0	0.911194D-02	0.620831D-01	81.65	0.003937
78.0	0.100935D+01	-0.101684D+00	-5.75	1.029130	78.0	-0.478953D-02	0.597922D-01	94.58	0.003598
79.0	0.102124D+01	-0.169894D+00	-9.35	1.071789	79.0	-0.190467D-01	0.561010D-01	104.79	0.003512
80.0	0.102902D+01	-0.237053D+00	-12.97	1.115082	80.0	-0.336379D-01	0.509645D-01	123.42	0.003731
81.0	0.103243D+01	-0.302764D+00	-16.34	1.157568	81.0	-0.482938D-01	0.444371D-01	137.38	0.004307
82.0	0.103170D+01	-0.366657D+00	-19.57	1.197749	82.0	-0.628930D-01	0.364739D-01	149.89	0.005287
83.0	0.102500D+01	-0.428345D+00	-22.68	1.234124	83.0	-0.772950D-01	0.271318D-01	160.66	0.006711
84.0	0.101368D+01	-0.487534D+00	-25.93	1.265541	84.0	-0.913188D-01	0.164663D-01	169.78	0.008610
85.0	0.997003D+00	-0.543820D+00	-28.61	1.289754	85.0	-0.104808D+00	0.456573D-02	177.51	0.011006
86.0	0.974781D+00	-0.596896D+00	-31.48	1.306482	86.0	-0.117602D+00	-0.847245D-02	-175.88	0.013902
87.0	0.946669D+00	-0.646451D+00	-34.32	1.314459	87.0	-0.129542D+00	-0.225201D-01	-170.14	0.017288
88.0	0.913156D+00	-0.692196D+00	-37.16	1.312989	88.0	-0.140474D+00	-0.374290D-01	-165.08	0.021134
89.0	0.873573D+00	-0.733868D+00	-40.03	1.301886	89.0	-0.150255D+00	-0.530299D-01	-160.56	0.025389
90.0	0.828095D+00	-0.771213D+00	-42.96	1.280511	90.0	-0.158746D+00	-0.691333D-01	-156.47	0.029980

CIRCULAR PP POLARIZATION KA= 6.000					CIRCULAR - JP POLARIZATION KA= 6.000				
THETA	REAL	IMAG	PHASE	NRCS	THETA	REAL	IMAG	PHASE	NRCS
90.0	0.828095D+00	-0.771213D+00	-82.96	1.280511	90.0	-0.158746D+00	-0.691333D-01	-156.87	0.029980
91.0	0.776746D+00	-0.804027D+00	-85.99	1.249795	91.0	-0.165822D+00	-0.855313D-01	-152.72	0.038813
92.0	0.719663D+00	-0.832119D+00	-89.15	1.210252	92.0	-0.171372D+00	-0.101999D+00	-149.24	0.039772
93.0	0.656793D+00	-0.853333D+00	-92.48	1.162974	93.0	-0.175296D+00	-0.118296D+00	-145.99	0.044722
94.0	0.588507D+00	-0.873582D+00	-96.03	1.109418	94.0	-0.177513D+00	-0.134170D+00	-142.92	0.049512
95.0	0.514988D+00	-0.896654D+00	-99.85	1.051368	95.0	-0.177960D+00	-0.149358D+00	-139.99	0.053977
96.0	0.436537D+00	-0.894608D+00	-103.99	0.990889	96.0	-0.176590D+00	-0.163590D+00	-137.19	0.057946
97.0	0.353520D+00	-0.897379D+00	-108.50	0.930266	97.0	-0.173800D+00	-0.176593D+00	-134.47	0.061246
98.0	0.266366D+00	-0.894875D+00	-113.83	0.871927	98.0	-0.168325D+00	-0.188091D+00	-131.83	0.063712
99.0	0.175541D+00	-0.887436D+00	-119.81	0.818357	99.0	-0.161442D+00	-0.197813D+00	-129.22	0.065194
100.0	0.816017D-01	-0.874858D+00	-126.67	0.772001	100.0	-0.152770D+00	-0.205491D+00	-126.63	0.065565
101.0	-0.148611D-01	-0.857290D+00	-130.99	0.735167	101.0	-0.142370D+00	-0.210871D+00	-124.03	0.064736
102.0	-0.113200D+00	-0.834932D+00	-137.72	0.709925	102.0	-0.130324D+00	-0.213710D+00	-121.38	0.062656
103.0	-0.212718D+00	-0.807938D+00	-144.75	0.698007	103.0	-0.116736D+00	-0.213783D+00	-118.64	0.059330
104.0	-0.312676D+00	-0.776499D+00	-151.93	0.700716	104.0	-0.101730D+00	-0.210687D+00	-115.75	0.054822
105.0	-0.412294D+00	-0.740858D+00	-159.10	0.718851	105.0	-0.854493D-01	-0.204844D+00	-112.64	0.049263
106.0	-0.510761D+00	-0.701255D+00	-166.07	0.752635	106.0	-0.680551D-01	-0.195506D+00	-109.19	0.042854
107.0	-0.607240D+00	-0.657980D+00	-173.70	0.801677	107.0	-0.497251D-01	-0.182757D+00	-105.22	0.035873
108.0	-0.700874D+00	-0.611330D+00	-181.90	0.864849	108.0	-0.306518D-01	-0.166515D+00	-100.43	0.028667
109.0	-0.790793D+00	-0.561625D+00	-190.62	0.940786	109.0	-0.110403D-01	-0.146739D+00	-94.33	0.021654
110.0	-0.876146D+00	-0.509201D+00	-199.84	1.026917	110.0	0.689422D-02	-0.123431D+00	-85.86	0.015314
111.0	-0.956053D+00	-0.454408D+00	-154.58	1.120524	111.0	0.289287D-01	-0.966752D-01	-73.33	0.010175
112.0	-0.102968D+01	-0.397609D+00	-156.89	1.218324	112.0	0.488350D-01	-0.664426D-01	-53.68	0.006799
113.0	-0.109619D+01	-0.339174D+00	-162.81	1.316679	113.0	0.683823D-01	-0.329935D-01	-25.76	0.005765
114.0	-0.115482D+01	-0.279478D+00	-166.46	1.411727	114.0	0.873403D-01	0.352265D-02	2.31	0.007641
115.0	-0.120483D+01	-0.218858D+00	-169.70	1.499526	115.0	0.105482D+00	0.428658D-01	22.12	0.012964
116.0	-0.124552D+01	-0.157814D+00	-172.78	1.576224	116.0	0.122587D+00	0.847450D-01	34.66	0.022209
117.0	-0.126288D+01	-0.965992D-01	-175.67	1.638824	117.0	0.138443D+00	0.128819D+00	42.94	0.035761
118.0	-0.125656D+01	-0.356220D-01	-178.43	1.682236	118.0	0.152851D+00	0.174695D+00	48.82	0.053882
119.0	-0.130589D+01	0.247577D-01	-178.41	1.705973	119.0	0.165625D+00	0.221935D+00	53.27	0.074687
120.0	-0.130391D+01	0.841915D-01	-176.21	1.707262	120.0	0.176559D+00	0.270050D+00	56.82	0.104114
121.0	-0.129032D+01	0.142385D+00	-173.70	1.685181	121.0	0.185623D+00	0.318510D+00	59.77	0.135905
122.0	-0.126495D+01	0.198899D+00	-171.06	1.639856	122.0	0.192742D+00	0.366741D+00	62.30	0.171584
123.0	-0.122773D+01	0.253558D+00	-168.33	1.571615	123.0	0.197800D+00	0.414132D+00	64.52	0.210452
124.0	-0.119781D+01	0.306300D+00	-165.45	1.468304	124.0	0.199871D+00	0.460400D+00	66.52	0.251585
125.0	-0.111805D+01	0.356067D+00	-162.33	1.376812	125.0	0.200092D+00	0.503789D+00	68.34	0.293840
126.0	-0.104601D+01	0.403432D+00	-158.91	1.256904	126.0	0.197992D+00	0.544681D+00	70.02	0.335878
127.0	-0.963012D+00	0.447913D+00	-155.06	1.128017	127.0	0.193578D+00	0.582000D+00	71.60	0.376196
128.0	-0.869550D+00	0.489325D+00	-150.63	0.995556	128.0	0.186889D+00	0.615015D+00	73.10	0.413171
129.0	-0.766257D+00	0.527510D+00	-145.46	0.865417	129.0	0.177991D+00	0.642990D+00	74.53	0.445118
130.0	-0.653873D+00	0.562336D+00	-139.30	0.743771	130.0	0.166980D+00	0.665189D+00	75.91	0.470359
131.0	-0.533242D+00	0.593368D+00	-131.97	0.636824	131.0	0.153980D+00	0.680882D+00	77.26	0.487311
132.0	-0.405308D+00	0.621518D+00	-123.11	0.550559	132.0	0.139141D+00	0.689354D+00	78.59	0.494569
133.0	-0.271107D+00	0.645747D+00	-112.77	0.490888	133.0	0.122639D+00	0.689908D+00	79.92	0.491014
134.0	-0.131758D+00	0.666359D+00	-101.18	0.416195	134.0	0.104673D+00	0.681880D+00	81.27	0.475917
135.0	0.115508D-01	0.683337D+00	89.03	0.467115	135.0	0.845542D-01	0.664638D+00	82.67	0.449048

CIRCULAR PP POLARIZATION

Kλ= 6.000

CIRCULAR OP POLARIZATION

Kλ= 6.000

CIRCULAR PP POLARIZATION

Kλ= 6.000

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CIRCULAR PP POLARIZATION

Kλ= 6.000

THETA	REAL	IMAG	PHASE	RECS	THETA	REAL	IMAG	PHASE	RECS
135.0	0.115508D+01	0.683357D+00	89.03	0.467110	135.0	0.854642D-01	0.664638D+00	82.67	0.449048
136.0	0.157571D+00	0.696766D+00	77.26	0.510311	136.0	0.652504D-01	0.637593D+00	84.16	0.410782
137.0	0.305070D+00	0.706637D+00	66.65	0.592365	137.0	0.442861D-01	0.600206D+00	85.78	0.362209
138.0	0.452531D+00	0.713044D+00	57.60	0.711316	138.0	0.238800D-01	0.551994D+00	87.63	0.305219
139.0	0.598796D+00	0.716080D+00	50.10	0.871327	139.0	0.118186D-02	0.492538D+00	89.86	0.242595
140.0	0.742453D+00	0.715859D+00	43.96	1.063690	140.0	-0.204011D-01	0.421424D+00	92.77	0.178065
141.0	0.882163D+00	0.712513D+00	38.93	1.285887	141.0	-0.416276D-01	0.338556D+00	97.01	0.116353
142.0	0.101662D+01	0.706190D+00	34.79	1.532217	142.0	-0.622163D-01	0.243556D+00	104.33	0.063190
143.0	0.114455D+01	0.697053D+00	31.34	1.795881	143.0	-0.818913D-01	0.136369D+00	120.99	0.025303
144.0	0.126476D+01	0.685277D+00	28.45	2.069213	144.0	-0.100386D+00	0.169684D-01	170.41	0.010365
145.0	0.137610D+01	0.671048D+00	26.00	2.343957	145.0	-0.117447D+00	-0.114581D+00	-135.71	0.026923
146.0	0.147754D+01	0.654559D+00	23.89	2.611573	146.0	-0.132837D+00	-0.258122D+00	-117.23	0.084273
147.0	0.156813D+01	0.636012D+00	22.08	2.863559	147.0	-0.146339D+00	-0.413401D+00	-109.49	0.192315
148.0	0.164706D+01	0.615613D+00	20.49	3.091780	148.0	-0.157759D+00	-0.580070D+00	-105.21	0.361368
149.0	0.171361D+01	0.593572D+00	19.11	3.288787	149.0	-0.166925D+00	-0.757684D+00	-102.42	0.601948
150.0	0.176723D+01	0.570036D+00	17.88	3.448107	150.0	-0.173700D+00	-0.945703D+00	-106.41	0.924526
151.0	0.180749D+01	0.545401D+00	16.79	3.564495	151.0	-0.177972D+00	-0.114349D+01	-98.85	1.339253
152.0	0.183416D+01	0.519690D+00	15.82	3.634445	152.0	-0.179663D+00	-0.135033D+01	-97.58	1.855677
153.0	0.184706D+01	0.493169D+00	14.95	3.654331	153.0	-0.178728D+00	-0.156541D+01	-96.51	2.482443
154.0	0.184623D+01	0.466038D+00	14.17	3.625983	154.0	-0.175158D+00	-0.178782D+01	-95.60	3.226987
155.0	0.183206D+01	0.438491D+00	13.46	3.548700	155.0	-0.168976D+00	-0.201660D+01	-94.79	4.095240
156.0	0.180472D+01	0.410716D+00	12.82	3.425685	156.0	-0.160441D+00	-0.225070D+01	-94.07	5.091350
157.0	0.176480D+01	0.382890D+00	12.34	3.261110	157.0	-0.149148D+00	-0.248902D+01	-93.43	5.217413
158.0	0.171297D+01	0.355184D+00	11.71	3.060428	158.0	-0.135212D+00	-0.273036D+01	-92.84	7.473255
159.0	0.165006D+01	0.327760D+00	11.23	2.830426	159.0	-0.119819D+00	-0.297353D+01	-92.31	8.856237
160.0	0.157701D+01	0.300769D+00	10.80	2.577432	160.0	-0.102131D+00	-0.321725D+01	-91.82	10.361122
161.0	0.149490D+01	0.274352D+00	10.40	2.310007	161.0	-0.826716D-01	-0.346022D+01	-91.37	11.979989
162.0	0.140492D+01	0.248640D+00	10.04	2.035617	162.0	-0.616811D-01	-0.370114D+01	-90.95	13.702215
163.0	0.130833D+01	0.223754D+00	9.70	1.761804	163.0	-0.394215D-01	-0.393865D+01	-90.57	15.514515
164.0	0.120651D+01	0.199808D+00	9.40	1.495592	164.0	-0.161729D-01	-0.417143D+01	-90.22	17.401053
165.0	0.110087D+01	0.176890D+00	9.13	1.243209	165.0	0.177696D-02	-0.439813D+01	-89.90	19.3483625
166.0	0.992881D+00	0.155104D+00	8.88	1.009870	166.0	0.321017D-01	-0.461745D+01	-89.60	21.321897
167.0	0.880313D+00	0.134527D+00	8.55	0.799608	167.0	0.565102D-01	-0.482810D+01	-89.33	23.313718
168.0	0.775820D+00	0.115231D+00	8.25	0.615175	168.0	0.806813D-01	-0.502881D+01	-89.08	25.295484
169.0	0.669734D+00	0.972797D-01	8.26	0.458007	169.0	0.104302D+00	-0.521840D+01	-88.85	27.242550
170.0	0.567226D+00	0.807291D-01	8.10	0.328262	170.0	0.127066D+00	-0.539570D+01	-88.65	29.129689
171.0	0.469697D+00	0.656277D-01	7.95	0.224922	171.0	0.146678D+00	-0.555963D+01	-88.47	30.931573
172.0	0.376880D+00	0.520174D-01	7.83	0.145953	172.0	0.168854D+00	-0.570918D+01	-88.31	32.623279
173.0	0.294819D+00	0.399335D-01	7.71	0.088513	173.0	0.187332D+00	-0.584383D+01	-88.16	34.180800
174.0	0.219856D+00	0.294060D-01	7.62	0.049201	174.0	0.203869D+00	-0.596154D+01	-88.04	35.581541
175.0	0.154610D+00	0.204595D-01	7.54	0.024323	175.0	0.218248D+00	-0.606277D+01	-87.94	36.804805
176.0	0.999717D-01	0.131140D-01	7.47	0.010166	176.0	0.230280D+00	-0.614648D+01	-87.85	37.832240
177.0	0.566841D-01	0.738521D-02	7.42	0.003268	177.0	0.239806D+00	-0.621214D+01	-87.79	38.648238
178.0	0.253266D-01	0.328502D-02	7.39	0.000653	178.0	0.246702D+00	-0.625935D+01	-87.74	39.240282
179.0	0.635576D-02	0.821656D-03	7.37	0.000041	179.0	0.250877D+00	-0.628779D+01	-87.72	39.599226
180.0	0.185073D-09	0.291059D-09	57.55	0.000000	180.0	0.252274D+00	-0.629729D+01	-87.71	39.719498

CIRCULAR PP POLARIZATION KA= 7.000					CIRCULAR OP POLARIZATION KA= 7.000				
THETA	REAL	IMAG	PHASZ	NRCS	THETA	REAL	IMAG	PHASZ	NRCS
0.0	0.214491D-01	-0.107482D+01	-88.86	1.155696	0.0	-0.684096D-11	0.869305D-12	172.76	0.000000
1.0	0.206433D-01	-0.107432D+01	-88.90	1.154596	1.0	0.135944D-03	-0.233220D-03	-59.76	0.000000
2.0	0.182275D-01	-0.107264D+01	-89.03	1.151318	2.0	0.562671D-03	-0.927917D-03	-59.68	0.000001
3.0	0.142068D-01	-0.107039D+01	-89.24	1.145930	3.0	0.121683D-02	-0.206923D-02	-59.54	0.000006
4.0	0.858969D-02	-0.106699D+01	-89.54	1.138544	4.0	0.215281D-02	-0.363270D-02	-59.35	0.000018
5.0	0.138822D-02	-0.106269D+01	-89.93	1.129315	5.0	0.334268D-02	-0.558465D-02	-59.10	0.000042
6.0	-0.736179D-02	-0.105753D+01	-90.40	1.118433	6.0	0.577614D-02	-0.788285D-02	-58.79	0.000085
7.0	-0.177006D-01	-0.105158D+01	-90.96	1.106124	7.0	0.644049D-02	-0.104772D-01	-58.42	0.000151
8.0	-0.295444D-01	-0.104488D+01	-91.62	1.092644	8.0	0.832089D-02	-0.133170D-01	-57.99	0.000246
9.0	-0.428515D-01	-0.103751D+01	-92.37	1.078273	9.0	0.103984D-01	-0.163203D-01	-57.50	0.000374
10.0	-0.576397D-01	-0.102955D+01	-93.21	1.063307	10.0	0.126537D-01	-0.194383D-01	-56.94	0.000538
11.0	-0.739206D-01	-0.102107D+01	-94.14	1.048058	11.0	0.150633D-01	-0.225934D-01	-56.31	0.000737
12.0	-0.915352D-01	-0.101216D+01	-95.17	1.032841	12.0	0.176016D-01	-0.257118D-01	-55.61	0.000977
13.0	-0.110485D+00	-0.100288D+01	-96.29	1.017973	13.0	0.202400D-01	-0.287189D-01	-54.83	0.001234
14.0	-0.130717D+00	-0.993315D+00	-97.50	1.003761	14.0	0.229476D-01	-0.315408D-01	-53.96	0.001521
15.0	-0.152172D+00	-0.963538D+00	-98.80	0.990503	15.0	0.256907D-01	-0.341050D-01	-53.01	0.001823
16.0	-0.174785D+00	-0.933618D+00	-100.18	0.978473	16.0	0.284334D-01	-0.363425D-01	-51.96	0.002129
17.0	-0.194485D+00	-0.963601D+00	-101.64	0.967923	17.0	0.311377D-01	-0.381888D-01	-50.81	0.002428
18.0	-0.223195D+00	-0.953501D+00	-103.17	0.959074	18.0	0.337636D-01	-0.395851D-01	-49.54	0.002707
19.0	-0.248834D+00	-0.943499D+00	-104.77	0.952109	19.0	0.362636D-01	-0.404799D-01	-48.14	0.002954
20.0	-0.275315D+00	-0.933475D+00	-106.43	0.947174	20.0	0.386133D-01	-0.408294D-01	-46.60	0.003158
21.0	-0.302543D+00	-0.923492D+00	-108.14	0.943369	21.0	0.407508D-01	-0.405994D-01	-44.89	0.003309
22.0	-0.330422D+00	-0.913547D+00	-109.88	0.93747	22.0	0.426393D-01	-0.397651D-01	-43.00	0.003399
23.0	-0.358508D+00	-0.903625D+00	-111.66	0.935312	23.0	0.442356D-01	-0.383126D-01	-40.90	0.003425
24.0	-0.387721D+00	-0.893653D+00	-113.45	0.945014	24.0	0.454979D-01	-0.362389D-01	-38.54	0.003383
25.0	-0.416924D+00	-0.883702D+00	-115.26	0.954754	25.0	0.463860D-01	-0.335525D-01	-35.88	0.003277
26.0	-0.446348D+00	-0.873586D+00	-117.06	0.962379	26.0	0.468624D-01	-0.302733D-01	-32.86	0.003113
27.0	-0.475979D+00	-0.863263D+00	-118.87	0.971684	27.0	0.468929D-01	-0.264326D-01	-29.41	0.002898
28.0	-0.505400D+00	-0.852636D+00	-120.66	0.982419	28.0	0.464710D-01	-0.220728D-01	-25.42	0.002645
29.0	-0.534796D+00	-0.841592D+00	-122.43	0.984284	29.0	0.454997D-01	-0.172470D-01	-20.76	0.002368
30.0	-0.563951D+00	-0.830002D+00	-124.19	1.006944	30.0	0.440309D-01	-0.120182D-01	-15.27	0.002083
31.0	-0.592748D+00	-0.817727D+00	-125.94	1.030028	31.0	0.420271D-01	-0.645843D-02	-8.74	0.001808
32.0	-0.621074D+00	-0.804616D+00	-127.66	1.033139	32.0	0.394817D-01	-0.647874D-03	-0.94	0.001559
33.0	-0.648818D+00	-0.790506D+00	-129.38	1.045865	33.0	0.363956D-01	0.532664D-02	8.33	0.001353
34.0	-0.675872D+00	-0.775230D+00	-131.08	1.057784	34.0	0.32779D-01	0.113728D-01	19.14	0.001204
35.0	-0.702131D+00	-0.758613D+00	-132.79	1.068482	35.0	0.286462D-01	0.173944D-01	31.27	0.001123
36.0	-0.727495D+00	-0.740481D+00	-134.49	1.077561	36.0	0.240270D-01	0.232930D-01	44.11	0.001120
37.0	-0.751867D+00	-0.720657D+00	-136.21	1.084650	37.0	0.189566D-01	0.289694D-01	56.80	0.001199
38.0	-0.775157D+00	-0.698967D+00	-137.96	1.089424	38.0	0.134765D-01	0.343256D-01	68.56	0.001360
39.0	-0.797280D+00	-0.675246D+00	-139.74	1.091613	39.0	0.764319D-02	0.392667D-01	78.99	0.001600
40.0	-0.818154D+00	-0.649336D+00	-141.56	1.091013	40.0	0.151786D-02	0.437023D-01	88.01	0.001912
41.0	-0.837704D+00	-0.621090D+00	-143.45	1.087501	41.0	-0.482909D-02	0.475586D-01	95.80	0.002284
42.0	-0.855861D+00	-0.590377D+00	-145.40	1.081044	42.0	-0.113166D-01	0.507298D-01	102.58	0.002702
43.0	-0.872588D+00	-0.557087D+00	-147.44	1.071704	43.0	-0.178686D-01	0.531799D-01	108.57	0.003147
44.0	-0.887735D+00	-0.521127D+00	-149.59	1.059446	44.0	-0.243852D-01	0.54843D-01	113.97	0.003603
45.0	-0.901333D+00	-0.482430D+00	-151.84	1.045140	45.0	-0.307736D-01	0.556860D-01	118.93	0.004047

CIRCULAR PP POLARIZATION KA= 7.000					CIRCULAR OP POLARIZATION KA= 7.000				
THETA	REAL	IMAG	PHASE	NRCS	THETA	REAL	IMAG	PHASE	NRCS
45.0	-0.901333D+00	-0.482830D+00	-151.84	1.045140	45.0	-0.307736D-01	0.556806D-01	118.93	0.004047
46.0	-0.913298D+00	-0.440956D+00	-154.23	1.028556	46.0	-0.369343D-01	0.556602D-01	123.57	0.004462
47.0	-0.923579D+00	-0.396691D+00	-156.76	1.010362	47.0	-0.427656D-01	0.547691D-01	127.98	0.004829
48.0	-0.932125D+00	-0.349656D+00	-159.44	0.991115	48.0	-0.481550D-01	0.530086D-01	132.26	0.005130
49.0	-0.938885D+00	-0.299901D+00	-162.29	0.971445	49.0	-0.503099D-01	0.503956D-01	136.46	0.005352
50.0	-0.943810D+00	-0.247513D+00	-165.31	0.949039	50.0	-0.572643D-01	0.469630D-01	140.64	0.005585
51.0	-0.946887D+00	-0.192613D+00	-168.50	0.933620	51.0	-0.607704D-01	0.427592D-01	144.87	0.005521
52.0	-0.947945D+00	-0.135359D+00	-171.87	0.915921	52.0	-0.634653D-01	0.378485D-01	149.19	0.005460
53.0	-0.947085D+00	-0.759481D-01	-175.42	0.902662	53.0	-0.652532D-01	0.323096D-01	153.66	0.005302
54.0	-0.944089D+00	-0.145976D-01	-179.11	0.891518	54.0	-0.660774D-01	0.262348D-01	158.35	0.005054
55.0	-0.939013D+00	0.484153D-01	177.05	0.880089	55.0	-0.658728D-01	0.197293D-01	163.33	0.004728
56.0	-0.931747D+00	0.112795D+00	173.10	0.880875	56.0	-0.645916D-01	0.129090D-01	168.70	0.004339
57.0	-0.922217D+00	0.178210D+00	169.06	0.882244	57.0	-0.622005D-01	0.589915D-02	174.58	0.003904
58.0	-0.910347D+00	0.244297D+00	164.98	0.888412	58.0	-0.586814D-01	-0.116800D-02	178.86	0.003445
59.0	-0.896052D+00	0.310665D+00	160.88	0.899422	59.0	-0.540328D-01	-0.815504D-02	171.42	0.002986
60.0	-0.879245D+00	0.376900D+00	156.80	0.915125	60.0	-0.482704D-01	-0.149220D-01	162.82	0.002553
61.0	-0.859836D+00	0.442562D+00	152.76	0.935178	61.0	-0.414280D-01	-0.213290D-01	152.76	0.002171
62.0	-0.837731D+00	0.507197D+00	148.61	0.959043	62.0	-0.335576D-01	-0.272386D-01	140.93	0.001868
63.0	-0.812838D+00	0.570336D+00	144.94	0.985990	63.0	-0.247296D-01	-0.325186D-01	127.25	0.001669
64.0	-0.785065D+00	0.631501D+00	141.19	1.015119	64.0	-0.150323D-01	-0.370449D-01	112.09	0.001598
65.0	-0.754320D+00	0.690207D+00	137.54	1.045385	65.0	-0.457161D-02	-0.407040D-01	96.41	0.001678
66.0	-0.720522D+00	0.745974D+00	134.01	1.075629	66.0	0.652984D-02	-0.433957D-01	81.44	0.001926
67.0	-0.683553D+00	0.798324D+00	130.57	1.106621	67.0	0.181341D-01	-0.450353D-01	68.07	0.002357
68.0	-0.643470D+00	0.846791D+00	127.23	1.137109	68.0	0.300893D-01	-0.455563D-01	56.56	0.002981
69.0	-0.601033D+00	0.890925D+00	123.96	1.153872	69.0	0.422314D-01	-0.449120D-01	46.76	0.003801
70.0	-0.553458D+00	0.930300D+00	120.75	1.171773	70.0	0.543864D-01	-0.430776D-01	38.38	0.004814
71.0	-0.503526D+00	0.964511D+00	117.57	1.183821	71.0	0.663726D-01	-0.400515D-01	31.11	0.006009
72.0	-0.450320D+00	0.993192D+00	114.39	1.189218	72.0	0.780032D-01	-0.358563D-01	24.69	0.007370
73.0	-0.393883D+00	0.101601D+01	111.19	1.187414	73.0	0.890890D-01	-0.305397D-01	18.92	0.008870
74.0	-0.334289D+00	0.103267D+01	107.94	1.178148	74.0	0.994416D-01	-0.241747D-01	13.66	0.010473
75.0	-0.271649D+00	0.104292D+01	104.60	1.161480	75.0	0.108876D+00	-0.168591D-01	8.80	0.012138
76.0	-0.206113D+00	0.104658D+01	101.14	1.137808	76.0	0.117218D+00	-0.871532D-02	4.25	0.013815
77.0	-0.137872D+00	0.104399D+01	97.53	1.107881	77.0	0.124287D+00	0.110968D-03	0.05	0.015447
78.0	-0.671610D-01	0.103357D+01	93.72	1.072777	78.0	0.129400D+00	0.945252D-02	4.16	0.016974
79.0	0.573632D-02	0.101679D+01	89.68	1.033886	79.0	0.134034D+00	0.191225D-01	8.12	0.018331
80.0	0.804895D-01	0.993168D+00	85.37	0.992861	80.0	0.136447D+00	0.289171D-01	11.97	0.019454
81.0	0.156719D+00	0.962805D+00	80.75	0.951555	81.0	0.137080D+00	0.346184D-01	15.73	0.020282
82.0	0.233995D+00	0.925850D+00	75.62	0.911951	82.0	0.135458D+00	0.475984D-01	19.46	0.020761
83.0	0.311839D+00	0.882513D+00	70.54	0.876073	83.0	0.132731D+00	0.568214D-01	23.18	0.020846
84.0	0.389726D+00	0.833068D+00	64.93	0.845889	84.0	0.127676D+00	0.648497D-01	26.93	0.020507
85.0	0.467085D+00	0.777868D+00	59.02	0.823213	85.0	0.120700D+00	0.718469D-01	30.76	0.019731
86.0	0.543303D+00	0.717234D+00	52.86	0.809603	86.0	0.111841D+00	0.775829D-01	34.75	0.018527
87.0	0.617730D+00	0.651673D+00	46.53	0.806268	87.0	0.101164D+00	0.818384D-01	38.97	0.016932
88.0	0.686819D+00	0.581654D+00	40.14	0.813981	88.0	0.887674D-01	0.844098D-01	43.56	0.015005
89.0	0.758448D+00	0.507713D+00	33.80	0.833016	89.0	0.747773D-01	0.851139D-01	48.70	0.012836
90.0	0.823301D+00	0.430429D+00	27.60	0.863093	90.0	0.593493D-01	0.837925D-01	54.69	0.010544

CIRCULAR PP POLARIZATION					CIRCULAR OF POLARIZATION					K _A = 7.000				
THETA	REAL	IMAG	PHASE	NRCS	THETA	REAL	IMAG	PHASE	NRCS	THETA	REAL	IMAG	PHASE	NRCS
90.0	0.823301D+00	0.430429D+00	27.60	0.863093	90.0	0.593493D-01	0.637925D-01	54.69	0.010544	90.0	0.593493D-01	0.637925D-01	54.69	0.010544
91.0	0.883498D+00	0.350415D+00	21.63	0.903359	91.0	0.426658D-01	0.803166D-01	62.02	0.008271	92.0	0.249345D-01	0.745912D-01	71.52	0.006186
92.0	0.938296D+00	0.268318D+00	15.96	0.952352	92.0	0.249345D-01	0.745912D-01	71.52	0.006186	93.0	0.638533D-02	0.665582D-01	84.52	0.004471
93.0	0.986958D+00	0.184795D+00	10.61	1.008236	93.0	0.638533D-02	0.665582D-01	84.52	0.004471	94.0	0.102877D+01	0.562008D-01	102.76	0.003321
94.0	0.102877D+01	0.100542D+00	5.58	1.068467	94.0	-0.127223D-01	0.562008D-01	102.76	0.003321	95.0	-0.321528D-01	0.435452D-01	126.74	0.002930
95.0	0.106902D+01	0.162521D-01	0.88	1.150285	95.0	-0.321528D-01	0.435452D-01	126.74	0.002930	96.0	-0.515986D-01	0.286638D-01	150.95	0.003484
96.0	0.108908D+01	-0.673744D-01	-3.54	1.190640	96.0	-0.515986D-01	0.286638D-01	150.95	0.003484	97.0	-0.707836D-01	0.116762D-01	170.63	0.005147
97.0	0.110634D+01	-0.149640D+00	-7.70	1.246374	97.0	-0.707836D-01	0.116762D-01	170.63	0.005147	98.0	-0.894184D-01	-0.724974D-02	-175.36	0.008048
98.0	0.111425D+01	-0.229857D+00	-11.66	1.294301	98.0	-0.894184D-01	-0.724974D-02	-175.36	0.008048	99.0	-0.107214D+00	-0.278979D-01	-165.41	0.012273
99.0	0.112355D+01	-0.307355D+00	-15.45	1.331778	99.0	-0.107214D+00	-0.278979D-01	-165.41	0.012273	100.0	-0.123887D+00	-0.500049D-01	-158.02	0.017849
100.0	0.110025D+01	-0.381486D+00	-19.12	1.356075	100.0	-0.123887D+00	-0.500049D-01	-158.02	0.017849	101.0	-0.139165D+00	-0.732613D-01	-152.24	0.024734
101.0	0.107767D+01	-0.451633D+00	-22.74	1.365336	101.0	-0.139165D+00	-0.732613D-01	-152.24	0.024734	102.0	-0.152790D+00	-0.973147D-01	-147.51	0.032815
102.0	0.104442D+01	-0.517215D+00	-26.35	1.358319	102.0	-0.152790D+00	-0.973147D-01	-147.51	0.032815	103.0	-0.164522D+00	-0.121772D+00	-143.49	0.041896
103.0	0.100043D+01	-0.577694D+00	-30.00	1.334544	103.0	-0.164522D+00	-0.121772D+00	-143.49	0.041896	104.0	-0.174148D+00	-0.145206D+00	-139.98	0.051704
104.0	0.945762D+00	-0.632579D+00	-33.78	1.294622	104.0	-0.174148D+00	-0.145206D+00	-139.98	0.051704	105.0	-0.181480D+00	-0.170158D+00	-136.84	0.061889
105.0	0.880589D+00	-0.681431D+00	-37.73	1.239786	105.0	-0.181480D+00	-0.170158D+00	-136.84	0.061889	106.0	-0.186365D+00	-0.193145D+00	-133.98	0.072037
106.0	0.805227D+00	-0.723669D+00	-41.95	1.172377	106.0	-0.186365D+00	-0.193145D+00	-133.98	0.072037	107.0	-0.188682D+00	-0.214665D+00	-131.31	0.081682
107.0	0.720127D+00	-0.759571D+00	-46.53	1.095532	107.0	-0.188682D+00	-0.214665D+00	-131.31	0.081682	108.0	-0.188349D+00	-0.234208D+00	-128.81	0.090329
108.0	0.625679D+00	-0.788281D+00	-51.55	1.013112	108.0	-0.188349D+00	-0.234208D+00	-128.81	0.090329	109.0	-0.185325D+00	-0.251260D+00	-126.41	0.097477
109.0	0.523211D+00	-0.809807D+00	-57.13	0.929537	109.0	-0.185325D+00	-0.251260D+00	-126.41	0.097477	110.0	-0.179609D+00	-0.265533D+00	-124.10	0.102650
110.0	0.412986D+00	-0.824025D+00	-63.38	0.849575	110.0	-0.179609D+00	-0.265533D+00	-124.10	0.102650	111.0	-0.171244D+00	-0.275874D+00	-121.83	0.105431
111.0	0.296199D+00	-0.830879D+00	-70.38	0.778094	111.0	-0.171244D+00	-0.275874D+00	-121.83	0.105431	112.0	-0.160318D+00	-0.282375D+00	-119.56	0.105493
112.0	0.173968D+00	-0.830383D+00	-78.17	0.719801	112.0	-0.160318D+00	-0.282375D+00	-119.56	0.105493	113.0	-0.146349D+00	-0.284681D+00	-117.30	0.102637
113.0	0.475289D-01	-0.822616D+00	-86.69	0.678996	113.0	-0.146349D+00	-0.284681D+00	-117.30	0.102637	114.0	-0.131315D+00	-0.282101D+00	-114.96	0.095825
114.0	-0.817821D-01	-0.807726D+00	-95.78	0.659110	114.0	-0.131315D+00	-0.282101D+00	-114.96	0.095825	115.0	-0.113622D+00	-0.274395D+00	-112.49	0.088203
115.0	-0.212536D+00	-0.785924D+00	-105.13	0.662848	115.0	-0.113622D+00	-0.274395D+00	-112.49	0.088203	116.0	-0.941142D-01	-0.261286D+00	-109.81	0.077128
116.0	-0.343230D+00	-0.757481D+00	-114.38	0.691585	116.0	-0.941142D-01	-0.261286D+00	-109.81	0.077128	117.0	-0.730685D-01	-0.242565D+00	-106.76	0.064177
117.0	-0.472302D+00	-0.722730D+00	-123.16	0.745408	117.0	-0.730685D-01	-0.242565D+00	-106.76	0.064177	118.0	-0.507920D-01	-0.218104D+00	-103.11	0.050109
118.0	-0.598153D+00	-0.682053D+00	-131.25	0.822983	118.0	-0.507920D-01	-0.218104D+00	-103.11	0.050109	119.0	-0.276161D-01	-0.187858D+00	-98.36	0.036053
119.0	-0.719164D+00	-0.635884D+00	-138.52	0.921545	119.0	-0.276161D-01	-0.187858D+00	-98.36	0.036053	120.0	-0.1389159D-02	-0.151875D+00	-91.47	0.023081
120.0	-0.833721D+00	-0.584701D+00	-144.96	1.036965	120.0	-0.1389159D-02	-0.151875D+00	-91.47	0.023081	121.0	0.200167D-01	-0.110301D+00	-79.71	0.012567
121.0	-0.940235D+00	-0.529018D+00	-150.64	1.163902	121.0	0.200167D-01	-0.110301D+00	-79.71	0.012567	122.0	0.437360D-01	-0.633847D-01	-55.39	0.005930
122.0	-0.103717D+01	-0.469386D+00	-155.65	1.296038	122.0	0.437360D-01	-0.633847D-01	-55.39	0.005930	123.0	0.668915D-01	-0.114775D-01	-9.74	0.004606
123.0	-0.112305D+01	-0.406379D+00	-160.11	1.426344	123.0	0.668915D-01	-0.114775D-01	-9.74	0.004606	124.0	0.891129D-01	0.449591D-01	26.77	0.009962
124.0	-0.119651D+01	-0.340593D+00	-164.11	1.547646	124.0	0.891129D-01	0.449591D-01	26.77	0.009962	125.0	6.110041D+00	0.105358D+00	43.75	0.023209
125.0	-0.125631D+01	-0.272635D+00	-167.76	1.652633	125.0	6.110041D+00	0.105358D+00	43.75	0.023209	126.0	0.129332D+00	0.165046D+00	52.58	0.045303
126.0	-0.130132D+01	-0.203123D+00	-171.13	1.734695	126.0	0.129332D+00	0.165046D+00	52.58	0.045303	127.0	0.146667D+00	0.235243D+00	58.06	0.076851
127.0	-0.130600D+01	-0.132673D+00	-174.31	1.788093	127.0	0.146667D+00	0.235243D+00	58.06	0.076851	128.0	0.161757D+00	0.303074D+00	61.91	0.118019
128.0	-0.133388D+01	-0.618971D-01	-177.36	1.808500	128.0	0.161757D+00	0.303074D+00	61.91	0.118019	129.0	0.174343D+00	0.371564D+00	64.86	0.168456
129.0	-0.133909D+01	0.864595D-02	-179.63	1.793232	129.0	0.174343D+00	0.371564D+00	64.86	0.168456	130.0	0.184210D+00	0.439658D+00	67.27	0.227233
130.0	-0.131737D+01	0.782537D-01	-176.60	1.741589	130.0	0.184210D+00	0.439658D+00	67.27	0.227233	131.0	0.191184D+00	0.506218D+00	69.31	0.292808
131.0	-0.127808D+01	0.146487D+00	-173.45	1.654953	131.0	0.191184D+00	0.506218D+00	69.31	0.292808	132.0	0.195138D+00	0.570041D+00	71.10	0.363025
132.0	-0.121332D+01	0.217775D+00	-170.12	1.536895	132.0	0.195138D+00	0.570041D+00	71.10	0.363025	133.0	0.195955D+00	0.629667D+00	72.72	0.435146
133.0	-0.110741D+01	0.297678D+00	-166.45	1.393078	133.0	0.195955D+00	0.629667D+00	72.72	0.435146	134.0	0.193731D+00	0.684394D+00	74.19	0.505927
134.0	-0.105694D+01	0.337559D+00	-162.29	1.231058	134.0	0.193731D+00	0.684394D+00	74.19	0.505927	135.0	0.188374D+00	0.732292D+00	75.57	0.571737
135.0	-0.950687D+00	0.395173D+00	-157.43	1.059968	135.0	0.188374D+00	0.732292D+00	75.57	0.571737					

CIRCULAR PP POLARIZATION KL= 7.000					CIRCULAR OF POLARIZATION KA= 7.000				
THETA	REAL	IMAG	PHASE	WCS	THETA	REAL	IMAG	PHASE	WCS
90.0	0.823301D+00	0.430629D+00	27.60	0.863093	90.0	0.593493D-01	0.837925D-01	58.69	0.010544
91.0	0.883498D+00	0.350415D+00	21.63	0.903359	91.0	0.426658D-01	0.803166D-01	62.02	0.008271
92.0	0.938296D+00	0.268314D+00	15.96	0.952392	92.0	0.249345D-01	0.745912D-01	71.52	0.006186
93.0	0.986958D+00	0.184795D+00	10.61	1.008236	93.0	0.638533D-02	0.665582D-01	84.52	0.004471
94.0	0.102877D+01	0.100542D+00	5.58	1.068467	94.0	-0.127323D-01	0.562008D-01	102.76	0.003321
95.0	0.106302D+01	0.162551D-01	0.88	1.130285	95.0	-0.321528D-01	0.435452D-01	126.14	0.002930
96.0	0.108908D+01	-0.673744D-01	-3.54	1.190640	96.0	-0.515986D-01	0.286638D-01	150.95	0.003484
97.0	0.110634D+01	-0.149640D+00	-7.70	1.246374	97.0	-0.707836D-01	0.116762D-01	170.63	0.005147
98.0	0.111425D+01	-0.229857D+00	-11.66	1.294381	98.0	-0.894184D-01	-0.724974D-02	-175.36	0.008048
99.0	0.111235D+01	-0.307355D+00	-15.45	1.331778	99.0	-0.107214D+00	-0.278979D-01	-165.41	0.012273
100.0	0.110025D+01	-0.381486E+00	-19.12	1.356075	100.0	-0.123887D+00	-0.500089D-01	-158.02	0.017849
101.0	0.107767D+01	-0.451633D+00	-22.74	1.365336	101.0	-0.139165D+00	-0.732613D-01	-152.24	0.024734
102.0	0.104420D+01	-0.517215D+00	-26.35	1.358319	102.0	-0.152790D+00	-0.973167D-01	-147.51	0.032815
103.0	0.100043D+01	-0.577694D+00	-30.00	1.334594	103.0	-0.164522D+00	-0.121772D+00	-143.49	0.041896
104.0	0.945762D+00	-0.632579D+00	-33.78	1.294622	104.0	-0.174188D+00	-0.186206D+00	-139.98	0.051704
105.0	0.880589D+00	-0.681431D+00	-37.73	1.239786	105.0	-0.181480D+00	-0.170158D+00	-136.84	0.061889
106.0	0.805227D+00	-0.723869D+00	-41.95	1.172377	106.0	-0.186365D+00	-0.193145D+00	-133.98	0.072037
107.0	0.720127D+00	-0.759571D+00	-46.53	1.095532	107.0	-0.160314D+00	-0.214665D+00	-131.31	0.081682
108.0	0.625879D+00	-0.788281D+00	-51.55	1.013112	108.0	-0.188349D+00	-0.234208D+00	-128.81	0.090329
109.0	0.522171D+00	-0.809607D+00	-57.13	0.929537	109.0	-0.185325D+00	-0.251260D+00	-126.41	0.097477
110.0	0.412986D+00	-0.824025D+00	-63.38	0.849575	110.0	-0.179603D+00	-0.265513D+00	-124.10	0.102650
111.0	0.296199D+00	-0.830879D+00	-70.38	0.774094	111.0	-0.171244D+00	-0.275874D+00	-121.83	0.105431
112.0	0.173968D+00	-0.830383D+00	-78.17	0.719801	112.0	-0.160314D+00	-0.282475D+00	-119.58	0.105493
113.0	0.475289D-01	-0.822616D+00	-86.69	0.678956	113.0	-0.146949D+00	-0.284681D+00	-117.30	0.102637
114.0	-0.817821D-01	-0.807726D+00	-95.78	0.659110	114.0	-0.131315D+00	-0.282101D+00	-114.96	0.095825
115.0	-0.212536D+00	-0.785924D+00	-105.13	0.662848	115.0	-0.113622D+00	-0.274395D+00	-112.49	0.088203
116.0	-0.342330D+00	-0.757481D+00	-114.38	0.691585	116.0	-0.941182D-01	-0.261286D+00	-109.81	0.077128
117.0	-0.472302D+00	-0.722730D+00	-123.16	0.745408	117.0	-0.730685D-01	-0.242565D+00	-106.76	0.064177
118.0	-0.598153D+00	-0.682053D+00	-131.25	0.822983	118.0	-0.507920D-01	-0.218104D+00	-103.11	0.050149
119.0	-0.719164D+00	-0.635884D+00	-138.52	0.921545	119.0	-0.276161D-01	-0.187858D+00	-98.36	0.036053
120.0	-0.833721D+00	-0.584701D+00	-144.96	1.036965	120.0	-0.389159D-02	-0.151875D+00	-91.47	0.023081
121.0	-0.940235D+00	-0.529018D+00	-150.64	1.163902	121.0	0.200167D-01	-0.110301D+00	-79.71	0.012567
122.0	-0.105717D+01	-0.469386D+00	-155.65	1.296038	122.0	0.437360D-01	-0.63384D-01	-55.39	0.005930
123.0	-0.112305D+01	-0.406379D+00	-160.11	1.426384	123.0	0.668915D-01	-0.714775D-01	-9.74	0.004606
124.0	-0.119651D+01	-0.340593D+00	-164.11	1.547646	124.0	0.891129D-01	0.449591D-01	26.77	0.009962
125.0	-0.125631D+01	-0.272635D+00	-167.76	1.652633	125.0	0.110047D+00	0.105358D+00	43.75	0.023209
126.0	-0.130132D+01	-0.203123D+00	-171.13	1.734685	126.0	0.129332D+00	0.169086D+00	52.58	0.045303
127.0	-0.133060D+01	-0.132673D+00	-174.51	1.780093	127.0	0.146667D+00	0.235283D+00	58.06	0.076851
128.0	-0.133388D+01	-0.618971D-01	-177.36	1.808500	128.0	0.161757D+00	0.303074D+00	61.91	0.118019
129.0	-0.133909D+01	0.860395D-02	179.63	1.793232	129.0	0.174343D+00	0.371564D+00	64.86	0.168456
130.0	-0.131737D+01	0.742537D-01	176.60	1.741589	130.0	0.184210D+00	0.439658D+00	67.27	0.227233
131.0	-0.127808D+01	0.146487D+00	173.46	1.654953	131.0	0.191184D+00	0.506218D+00	69.31	0.292808
132.0	-0.122132D+01	0.212775D+00	170.12	1.536895	132.0	0.195138D+00	0.570041D+00	71.10	0.365025
133.0	-0.114747D+01	0.276619D+00	166.45	1.393078	133.0	0.195995D+00	0.625867D+00	72.72	0.435146
134.0	-0.105694D+01	0.337559D+00	162.29	1.231058	134.0	0.193737D+00	0.684394D+00	74.19	0.505927
135.0	-0.950687D+00	0.195173D+00	157.43	1.059968	135.0	0.188374D+00	0.732322D+00	75.57	0.571737

CIRCULAR PP POLARIZATION				CIRCULAR OP POLARIZATION			
KA= 7.000				KA= 7.000			
THETA	REAL	IMAG	PHASE	THETA	REAL	IMAG	PHASE
135.0	-0.950687D+00	0.395173D+00	157.43	135.0	0.188374D+00	0.732292D+00	75.57
136.0	-0.829795D+00	0.449085D+00	151.58	136.0	0.180005D+00	0.772217D+00	76.88
137.0	-0.695246D+00	0.498964D+00	144.33	137.0	0.168757D+00	0.802826D+00	78.13
138.0	-0.548771D+00	0.544528D+00	135.22	138.0	0.154815D+00	0.822977D+00	79.34
139.0	-0.391932D+00	0.585542D+00	123.80	139.0	0.138410D+00	0.830843D+00	80.54
140.0	-0.226552D+00	0.621825D+00	110.02	140.0	0.119819D+00	0.825732D+00	81.74
141.0	-0.545962D-01	0.653281D+00	94.78	141.0	0.993581D-01	0.806302D+00	82.98
142.0	0.121851D+00	0.639709D+00	79.84	142.0	0.773788D-01	0.771478D+00	84.27
143.0	0.300617D+00	0.701191D+00	66.79	143.0	0.542618D-01	0.720291D+00	85.69
144.0	0.479470D+00	0.717702D+00	56.25	144.0	0.304089D-01	0.651894D+00	87.33
145.0	0.656157D+00	0.729297D+00	48.02	145.0	0.623985D-02	0.565572D+00	89.37
146.0	0.828434D+00	0.736076D+00	41.62	146.0	-0.178188D-01	0.460762D+00	92.21
147.0	0.994102D+00	0.738179D+00	36.60	147.0	-0.413392D-01	0.337066D+00	96.99
148.0	0.115104D+01	0.735783D+00	32.59	148.0	-0.639002D-01	0.194255D+00	108.21
149.0	0.129743D+01	0.729097D+00	29.34	149.0	-0.850951D-01	0.322857D-01	159.22
150.0	0.143088D+01	0.718361D+00	26.66	150.0	-0.104539D+00	-0.148696D+00	-125.11
151.0	0.155023D+01	0.703842D+00	24.42	151.0	-0.121875D+00	-0.348348D+00	-109.28
152.0	0.165385D+01	0.685827D+00	22.52	152.0	-0.136783D+00	-0.566129D+00	-103.58
153.0	0.174049D+01	0.664623D+00	20.90	153.0	-0.148983D+00	-0.801299D+00	-100.53
154.0	0.180948D+01	0.640552D+00	19.50	154.0	-0.158242D+00	-0.105293D+01	-98.55
155.0	0.185919D+01	0.613948D+00	18.27	155.0	-0.164379D+00	-0.131985D+01	-97.10
156.0	0.189012D+01	0.585149D+00	17.20	156.0	-0.167269D+00	-0.160078D+01	-95.97
157.0	0.190183D+01	0.554500D+00	16.25	157.0	-0.168840D+00	-0.189419D+01	-95.03
158.0	0.189449D+01	0.522345D+00	15.41	158.0	-0.163085D+00	-0.219882D+01	-94.14
159.0	0.186359D+01	0.489026D+00	14.67	159.0	-0.156052D+00	-0.251164D+01	-93.36
160.0	0.182488D+01	0.454881D+00	14.00	160.0	-0.145851D+00	-0.283187D+01	-92.95
161.0	0.176443D+01	0.420238D+00	13.40	161.0	-0.132649D+00	-0.315703D+01	-92.41
162.0	0.168855D+01	0.385416D+00	12.86	162.0	-0.116866D+00	-0.348490D+01	-91.92
163.0	0.159881D+01	0.350723D+00	12.37	163.0	-0.981755D-01	-0.381322D+01	-91.47
164.0	0.149699D+01	0.316452D+00	11.94	164.0	-0.774955D-01	-0.413962D+01	-91.07
165.0	0.138508D+01	0.282681D+00	11.54	165.0	-0.549857D-01	-0.446172D+01	-90.71
166.0	0.126521D+01	0.250273D+00	11.19	166.0	-0.310399D-01	-0.477710D+01	-90.37
167.0	0.113965D+01	0.218874D+00	10.87	167.0	-0.607897D-02	-0.508338D+01	-90.07
168.0	0.101074D+01	0.183911D+00	10.59	168.0	0.194561D-01	-0.537818D+01	-89.79
169.0	0.800844D+00	0.160594D+00	10.33	169.0	0.451126D-01	-0.565918D+01	-89.54
170.0	0.752475D+00	0.134116D+00	10.11	170.0	0.704346D-01	-0.592417D+01	-89.32
171.0	0.627875D+00	0.109649D+00	9.91	171.0	0.943705D-01	-0.617100D+01	-89.12
172.0	0.509369D+00	0.873507D-01	9.73	172.0	0.118282D+00	-0.639768D+01	-88.94
173.0	0.399123D+00	0.673599D-01	9.56	173.0	0.139952D+00	-0.660235D+01	-88.79
174.0	0.299149D+00	0.497917D-01	9.45	174.0	0.159529D+00	-0.678332D+01	-88.65
175.0	0.211269D+00	0.347556D-01	9.34	175.0	0.176848D+00	-0.693909D+01	-88.54
176.0	0.137081D+00	0.223365D-01	9.25	176.0	0.191412D+00	-0.706436D+01	-88.45
177.0	0.779331D-01	0.126048D-01	9.19	177.0	0.203021D+00	-0.717110D+01	-88.38
178.0	0.349008D-01	0.561497D-02	9.14	178.0	0.211465D+00	-0.724310D+01	-88.33
179.0	0.676496D-02	0.140566D-02	9.11	179.0	0.216594D+00	-0.728752D+01	-88.30
180.0	0.137774D-09	-0.190161D-10	-7.86	180.0	0.218314D+00	-0.730229D+01	-88.29

CIRCULAR PP POLARIZATION KA= 8.000					CIRCULAR OP POLARIZATION KA= 8.000				
THETA	REAL	IMAG	PHASE	NRCS	THETA	REAL	IMAG	PHASE	NRCS
0.0	0.871865D+00	0.416577D+00	25.54	0.933684	0.0	0.260365D-11	-0.872592D-11	-73.39	0.000000
1.0	0.872341D+00	0.415491D+00	25.47	0.933612	1.0	-0.132648D-03	0.255631D-03	117.42	0.000000
2.0	0.873768D+00	0.412244D+00	25.26	0.933414	2.0	-0.529367D-03	0.101562D-02	117.53	0.000001
3.0	0.876132D+00	0.406862D+00	24.91	0.933143	3.0	-0.116444D-02	0.225938D-02	117.70	0.000007
4.0	0.879418D+00	0.399393D+00	24.43	0.932885	4.0	-0.209761D-02	0.395308D-02	117.95	0.000020
5.0	0.883583D+00	0.389901D+00	23.81	0.932751	5.0	-0.325399D-02	0.605045D-02	118.27	0.000047
6.0	0.888618D+00	0.378465D+00	23.07	0.932877	6.0	-0.464395D-02	0.849380D-02	118.67	0.000094
7.0	0.894460D+00	0.365179D+00	22.21	0.933414	7.0	-0.625298D-02	0.112153D-01	119.14	0.000165
8.0	0.901063D+00	0.350150D+00	21.24	0.934515	8.0	-0.806358D-02	0.141387D-01	119.70	0.000265
9.0	0.908359D+00	0.333496D+00	20.16	0.936336	9.0	-0.100551D-01	0.171808D-01	120.34	0.000396
10.0	0.916286D+00	0.315342D+00	18.99	0.939020	10.0	-0.122036D-01	0.202534D-01	121.07	0.000559
11.0	0.924759D+00	0.295818D+00	17.74	0.942688	11.0	-0.144820D-01	0.232657D-01	121.90	0.000751
12.0	0.933691D+00	0.275058D+00	16.41	0.947437	12.0	-0.168598D-01	0.251260D-01	122.84	0.000967
13.0	0.942763D+00	0.253198D+00	15.23	0.953325	13.0	-0.193031D-01	0.267441D-01	123.88	0.001199
14.0	0.952525D+00	0.230368D+00	13.60	0.960374	14.0	-0.217750D-01	0.310333D-01	125.06	0.001437
15.0	0.962201D+00	0.206697D+00	12.12	0.968555	15.0	-0.242358D-01	0.329128D-01	126.37	0.001671
16.0	0.971884D+00	0.182304D+00	10.62	0.977794	16.0	-0.266430D-01	0.343094D-01	127.83	0.001887
17.0	0.981440D+00	0.157299D+00	9.11	0.987967	17.0	-0.289521D-01	0.351595D-01	129.47	0.002074
18.0	0.990725D+00	0.131782D+00	7.58	0.998902	18.0	-0.311169D-01	0.354109D-01	131.31	0.002242
19.0	0.999589D+00	0.105439D+00	6.04	1.010380	19.0	-0.330904D-01	0.350241D-01	133.37	0.002322
20.0	0.100788D+01	0.799539D-01	4.51	1.022142	20.0	-0.348251D-01	0.339737D-01	135.71	0.002367
21.0	0.101543D+01	0.529385D-01	2.98	1.033896	21.0	-0.362745D-01	0.322491D-01	138.36	0.002356
22.0	0.102208D+01	0.260753D-01	1.46	1.045321	22.0	-0.373936D-01	0.298551D-01	141.40	0.002290
23.0	0.102766D+01	-0.102864D-02	-0.06	1.056081	23.0	-0.381399D-01	0.268126D-01	144.89	0.002174
24.0	0.103200D+01	-0.283683D-01	-1.57	1.065834	24.0	-0.384747D-01	0.231580D-01	148.96	0.002017
25.0	0.103495D+01	-0.559543D-01	-3.09	1.074244	25.0	-0.383641D-01	0.169431D-01	153.72	0.001831
26.0	0.103632D+01	-0.838123D-01	-4.62	1.080991	26.0	-0.378020D-01	0.142342D-01	159.36	0.001630
27.0	0.103588D+01	-0.111981D+00	-6.17	1.085787	27.0	-0.367017D-01	0.91102D-02	166.06	0.001430
28.0	0.103375D+01	-0.140511D+00	-7.74	1.088369	28.0	-0.351155D-01	0.366529D-02	174.04	0.001247
29.0	0.102951D+01	-0.169460D+00	-9.35	1.088604	29.0	-0.330174D-01	-0.200101D-02	-176.53	0.001094
30.0	0.102311D+01	-0.198894D+00	-11.00	1.086311	30.0	-0.304129D-01	-0.777764D-02	-165.65	0.000985
31.0	0.101443D+01	-0.228881D+00	-12.71	1.081458	31.0	-0.273176D-01	-0.135484D-01	-153.62	0.000930
32.0	0.100337D+01	-0.259489D+00	-14.50	1.074081	32.0	-0.237581D-01	-0.191934D-01	-141.07	0.000933
33.0	0.989822D+00	-0.290782D+00	-16.37	1.063302	33.0	-0.197722D-01	-0.245919D-01	-128.80	0.000996
34.0	0.973717D+00	-0.32216D+00	-18.34	1.052335	34.0	-0.154048D-01	-0.296247D-01	-117.48	0.001115
35.0	0.954990D+00	-0.355635D+00	-20.43	1.034483	35.0	-0.107265D-01	-0.344770D-01	-107.42	0.001283
36.0	0.933588D+00	-0.389270D+00	-22.63	1.023137	36.0	-0.579653D-02	-0.381411D-01	-98.64	0.001488
37.0	0.909515D+00	-0.423732D+00	-24.98	1.006767	37.0	-0.698221D-03	-0.414189D-01	-90.97	0.001716
38.0	0.882733D+00	-0.459010D+00	-27.47	0.989908	38.0	0.448002D-02	-0.439244D-01	-84.18	0.001949
39.0	0.853265D+00	-0.495065D+00	-30.12	0.973151	39.0	0.964240D-02	-0.455958D-01	-78.06	0.002171
40.0	0.821139D+00	-0.531834D+00	-32.93	0.957117	40.0	0.146673D-01	-0.463480D-01	-72.42	0.002364
41.0	0.786404D+00	-0.569218D+00	-35.90	0.942440	41.0	0.195091D-01	-0.461737D-01	-67.10	0.002513
42.0	0.759124D+00	-0.607088D+00	-39.02	0.929742	42.0	0.240000D-01	-0.450450D-01	-61.95	0.002605
43.0	0.709379D+00	-0.645280D+00	-42.29	0.919605	43.0	0.280524D-01	-0.429645D-01	-56.86	0.002633
44.0	0.667265D+00	-0.683593D+00	-45.63	0.912542	44.0	0.315612D-01	-0.399554D-01	-51.69	0.002593
45.0	0.622892D+00	-0.721791D+00	-49.21	0.908977	45.0	0.344260D-01	-0.360623D-01	-46.33	0.002486

CIRCULAR PP POLARIZATION				CIRCULAR OP POLARIZATION			
KA= 8.000				KA= 8.000			
THETA	REAL	IMAG	PHASE	THETA	REAL	IMAG	PHASE
45.0	0.622892D+00	-0.721791D+00	-49.21	45.0	0.344260D-01	-0.360623D-01	-46.33
46.0	0.576381D+00	-0.759603D+00	-52.81	46.0	0.365538D-01	-0.313498D-01	-40.62
47.0	0.527865D+00	-0.796722D+00	-56.47	47.0	0.378615D-01	-0.259026D-01	-34.38
48.0	0.477485D+00	-0.832813D+00	-60.17	48.0	0.382779D-01	-0.193235D-01	-27.38
49.0	0.425391D+00	-0.867507D+00	-63.88	49.0	0.377464D-01	-0.132318D-01	-19.32
50.0	0.371739D+00	-0.900411D+00	-67.57	50.0	0.362270D-01	-0.062613D-02	-9.81
51.0	0.316690D+00	-0.931112D+00	-71.22	51.0	0.336979D-01	0.942691D-03	1.60
52.0	0.260410D+00	-0.959176D+00	-74.81	52.0	0.301574D-01	0.822626D-02	15.26
53.0	0.203067D+00	-0.984163D+00	-78.34	53.0	0.256249D-01	0.154300D-01	31.05
54.0	0.144833D+00	-1.00562D+00	-81.80	54.0	0.201417D-01	0.223927D-01	48.03
55.0	0.088827D-01	-0.102311D+01	-85.20	55.0	0.137714D-01	0.289550D-01	64.56
56.0	0.263913D-01	-0.103619D+01	-88.54	56.0	0.060009D-02	0.349629D-01	79.31
57.0	-0.334617D-01	-0.104448D+01	-91.84	57.0	-0.126472D-02	0.402721D-01	91.80
58.0	-0.938938D-01	-0.104746D+01	-95.10	58.0	-0.969486D-02	0.447511D-01	102.22
59.0	-0.135518D+00	-0.104488D+01	-98.36	59.0	-0.185432D-01	0.482849D-01	111.01
60.0	-0.213343D+00	-0.103638D+01	-101.63	60.0	-0.276458D-01	0.507785D-01	118.57
61.0	-0.272770D+00	-0.102167D+01	-104.95	61.0	-0.368244D-01	0.521595D-01	125.22
62.0	-0.331589D+00	-0.100052D+01	-108.34	62.0	-0.458894D-01	0.523810D-01	131.22
63.0	-0.389585D+00	-0.972778D+00	-111.83	63.0	-0.546436D-01	0.514227D-01	136.74
64.0	-0.446526D+00	-0.938324D+00	-115.45	64.0	-0.628855D-01	0.492355D-01	141.91
65.0	-0.502168D+00	-0.897130D+00	-119.24	65.0	-0.704139D-01	0.460315D-01	146.83
66.0	-0.556251D+00	-0.849241D+00	-123.22	66.0	-0.770315D-01	0.417045D-01	151.57
67.0	-0.608498D+00	-0.794780D+00	-127.44	67.0	-0.825501D-01	0.364091D-01	156.20
68.0	-0.658614D+00	-0.733950D+00	-131.90	68.0	-0.867943D-01	0.302699D-01	160.77
69.0	-0.706280D+00	-0.667040D+00	-136.64	69.0	-0.896061D-01	0.234372D-01	165.34
70.0	-0.751172D+00	-0.594427D+00	-141.64	70.0	-0.908493D-01	0.160844D-01	169.96
71.0	-0.792927D+00	-0.516548D+00	-146.92	71.0	-0.904131D-01	0.084044D-02	174.69
72.0	-0.831175D+00	-0.433945D+00	-152.43	72.0	-0.882157D-01	0.606149D-03	179.61
73.0	-0.865529D+00	-0.347231D+00	-158.14	73.0	-0.842076D-01	-0.703041D-02	-175.19
74.0	-0.895587D+00	-0.257084D+00	-163.98	74.0	-0.783737D-01	-0.144591D-01	-169.55
75.0	-0.920937D+00	-0.164251D+00	-169.89	75.0	-0.707359D-01	-0.212731D-01	-163.26
76.0	-0.941160D+00	-0.695336D-01	-175.77	76.0	-0.613335D-01	-0.273105D-01	-156.00
77.0	-0.955838D+00	0.262127D-01	-178.43	77.0	-0.503243D-01	-0.323599D-01	-147.26
78.0	-0.964560D+00	0.122095D+00	-172.79	78.0	-0.377840D-01	-0.362269D-01	-136.21
79.0	-0.965925D+00	0.217188D+00	-167.34	79.0	-0.239050D-01	-0.387394D-01	-121.68
80.0	-0.962550D+00	0.310552D+00	-162.12	80.0	-0.889427D-02	-0.397530D-01	-102.61
81.0	-0.951104D+00	0.401236D+00	-157.13	81.0	0.700901D-02	-0.391566D-01	-79.85
82.0	-0.932610D+00	0.486297D+00	-152.36	82.0	0.235376D-01	-0.368766D-01	-57.45
83.0	-0.905768D+00	0.570609D+00	-147.78	83.0	0.404003D-01	-0.328811D-01	-39.14
84.0	-0.871424D+00	0.647875D+00	-143.37	84.0	0.572872D-01	-0.271825D-01	-25.38
85.0	-0.829098D+00	0.718643D+00	-139.08	85.0	0.738751D-01	-0.198407D-01	-15.03
86.0	-0.778738D+00	0.782315D+00	-134.87	86.0	0.898340D-01	-0.109632D-01	-6.96
87.0	-0.720381D+00	0.838140D+00	-130.68	87.0	0.104833D+00	-0.706328D-03	-0.39
88.0	-0.654163D+00	0.885524D+00	-126.45	88.0	0.118549D+00	0.107267D-01	5.17
89.0	-0.580324D+00	0.923841D+00	-122.14	89.0	0.130671D+00	0.230673D-01	18.02
90.0	-0.499218D+00	0.952643D+00	-117.66	90.0	0.140908D+00	0.360853D-01	14.36

0.002486

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0.021157

CIRCULAR PP POLARIZATION KA= 8.000					CIRCULAR OP POLARIZATION KA= 8.000				
THETA 90.C	REAL	IMAG	PHASE 117.66	NRCS 1.156747	THETA 90.C	REAL	IMAG	PHASE 14.36	NRCS 0.021157
91.0	-0.411317D+00	0.971565D+00	112.95	1.113121	91.0	0.140998D+00	0.493933D-01	18.34	0.024010
92.0	-0.317216D+00	0.980357D+00	107.93	1.061724	92.0	0.154710D+00	0.626527D-01	22.03	0.027861
93.0	-0.217626D+00	0.978882D+00	102.53	1.005570	93.0	0.157859D+00	0.754799D-01	25.56	0.030615
94.0	-0.113392D+00	0.967125D+00	96.69	0.848168	94.0	0.158287D+00	0.874751D-01	28.93	0.032707
95.0	-0.547290D-02	0.945193D+00	90.33	0.693419	95.0	0.155908D+00	0.962300D-01	32.21	0.033957
96.0	0.105057D+00	0.913315D+00	83.44	0.545182	96.0	0.150677D+00	0.107338D+00	35.46	0.034225
97.0	0.217017D+00	0.871843D+00	76.02	0.407206	97.0	0.142605D+00	0.114403D+00	38.74	0.034424
98.0	0.329130D+00	0.821243D+00	68.16	0.282766	98.0	0.131761D+00	0.119051D+00	42.10	0.031534
99.0	0.440038D+00	0.762095D+00	60.00	0.174421	99.0	0.118271D+00	0.120941D+00	45.64	0.028615
100.0	0.548303D+00	0.695090D+00	51.73	0.783787	100.0	0.102319D+00	0.119773D+00	49.49	0.024815
101.0	0.652462D+00	0.621010D+00	43.59	0.911359	101.0	0.841413D-01	0.115300D+00	53.88	0.020374
102.0	0.751007D+00	0.540728D+00	35.75	0.856398	102.0	0.640276D-01	0.107337D+00	59.18	0.015621
103.0	0.842431D+00	0.455195D+00	28.38	0.916892	103.0	0.423129D-01	0.957596D-01	66.16	0.010962
104.0	0.925246D+00	0.365428D+00	21.55	0.989619	104.0	0.193733D-01	0.805619D-01	76.48	0.006866
105.0	0.998012D+00	0.272495D+00	15.27	1.070281	105.0	-0.436054D-02	0.617629D-01	94.06	0.003834
106.0	0.105936D+01	0.177504D+00	9.51	1.153750	106.0	-0.285115D-01	0.395110D-01	125.81	0.002374
107.0	0.110802D+01	0.815852D+00	4.21	1.234367	107.0	-0.525639D-01	0.140376D-01	165.05	0.002960
108.0	0.114285D+01	-0.141212D-01	-0.71	1.306325	108.0	-0.760730D-01	-0.143316D-01	-169.33	0.005993
109.0	0.116289D+01	-0.108481D+00	-5.33	1.364077	109.0	-0.985743D-01	-0.451773D-01	-155.38	0.011758
110.0	0.116731D+01	-0.200380D+00	-9.74	1.402759	110.0	-0.115613D+00	-0.779891D-01	-146.90	0.020390
111.0	0.115552D+01	-0.288741D+00	-14.03	1.418597	111.0	-0.138755D+00	-0.112171D+00	-141.05	0.031835
112.0	0.112715D+01	-0.372535D+00	-18.29	1.409258	112.0	-0.157593D+00	-0.147047D+00	-136.62	0.045832
113.0	0.108209D+01	-0.450796D+00	-22.62	1.374728	113.0	-0.169761D+00	-0.181872D+00	-133.03	0.061896
114.0	0.102045D+01	-0.522634D+00	-27.12	1.314470	114.0	-0.180939D+00	-0.215843D+00	-129.97	0.079327
115.0	0.942662D+00	-0.587244D+00	-31.92	1.233467	115.0	-0.188861D+00	-0.248111D+00	-127.28	0.097228
116.0	0.849401D+00	-0.643920D+00	-37.17	1.136115	116.0	-0.193324D+00	-0.277798D+00	-124.83	0.114546
117.0	0.741637D+00	-0.652059D+00	-43.02	1.028971	117.0	-0.194191D+00	-0.304011D+00	-122.57	0.130132
118.0	0.620616D+00	-0.731170D+00	-49.68	0.919774	118.0	-0.191396D+00	-0.325863D+00	-120.43	0.142820
119.0	0.487850D+00	-0.760881D+00	-57.33	0.816938	119.0	-0.184949D+00	-0.342894D+00	-118.37	0.151509
120.0	0.345105D+00	-0.780941D+00	-66.16	0.728966	120.0	-0.174935D+00	-0.353085D+00	-116.36	0.155271
121.0	0.194383D+00	-0.791221D+00	-76.20	0.663815	121.0	-0.161511D+00	-0.356844D+00	-114.35	0.153452
122.0	0.378909D-01	-0.701715D+00	-83.02	0.528248	122.0	-0.144911D+00	-0.353223D+00	-112.31	0.145765
123.0	-0.121948D+00	-0.782539D+00	-98.86	0.527277	123.0	-0.125434D+00	-0.341542D+00	-110.17	0.132385
124.0	-0.262713D+00	-0.763927D+00	-110.31	0.563511	124.0	-0.103448D+00	-0.321405D+00	-107.84	0.114003
125.0	-0.441666D+00	-0.736226D+00	-120.96	0.737098	125.0	-0.793727D-01	-0.292520D+00	-105.18	0.091868
126.0	-0.596152D+00	-0.699891D+00	-130.42	0.845244	126.0	-0.536796D-01	-0.254757D+00	-101.90	0.067782
127.0	-0.743469D+00	-0.655472D+00	-138.60	0.982390	127.0	-0.268789D-01	-0.208157D+00	-97.36	0.044052
128.0	-0.880952D+00	-0.603611D+00	-145.58	1.140423	128.0	0.490579D-03	0.152952D+00	-89.82	0.023395
129.0	-0.100602D+01	-0.545030D+00	-151.55	1.509134	129.0	0.278723D-01	-0.895702D-01	-72.71	0.003800
130.0	-0.111623D+01	-0.480517D+00	-156.71	1.476867	130.0	0.547042D-01	-0.186426D-01	-16.82	0.003340
131.0	-0.120933D+01	-0.410916D+00	-161.23	1.631322	131.0	0.804305D-01	0.589929D-01	36.26	0.009949
132.0	-0.128328D+01	-0.337116D+00	-165.28	1.760464	132.0	0.104515D+00	0.142292D+00	53.70	0.031170
133.0	-0.133636D+01	-0.260035D+00	-168.99	1.953469	133.0	0.126450D+00	0.230008D+00	61.20	0.068893
134.0	-0.136712D+01	-0.180611D+00	-172.47	1.901643	134.0	0.145774D+00	0.320701D+00	65.56	0.124099
135.0	-0.137451D+01	-0.997848D-01	-175.85	1.899227	135.0	0.162076D+00	0.412746D+00	68.56	0.196628

CIRCULAR PP POLARIZATION					CIRCULAR OP POLARIZATION					FA= 8.000				
THETA	REAL	IMAG	PHASE	NPCS	THETA	REAL	IMAG	PHASE	MRCs	THETA	REAL	IMAG	PHASE	MRCs
135.0	-0.137451D+01	-0.997848D-01	-175.85	1.899227	135.0	0.162076D+00	0.412746D+00	68.56	0.196628	135.0	0.162076D+00	0.412746D+00	68.56	0.196628
136.0	-0.135783D+01	-0.184904D-01	-179.22	1.844040	136.0	0.175007D+00	0.504354D+00	70.86	0.285001	136.0	0.175007D+00	0.504354D+00	70.86	0.285001
137.0	-0.131681D+01	0.623579D-01	-177.29	1.737875	137.0	0.184352D+00	0.593588D+00	77.75	0.386310	137.0	0.184352D+00	0.593588D+00	77.75	0.386310
138.0	-0.125160D+01	0.141877D+00	-173.53	1.586626	138.0	0.189731D+00	0.678385D+00	74.37	0.496204	138.0	0.189731D+00	0.678385D+00	74.37	0.496204
139.0	-0.116777D+01	0.219225D+00	-169.32	1.400105	139.0	0.191209D+00	0.755588D+00	75.82	0.608981	139.0	0.191209D+00	0.755588D+00	75.82	0.608981
140.0	-0.105135D+01	0.293613D+00	-164.80	1.191552	140.0	0.188598D+00	0.825957D+00	77.13	0.717811	140.0	0.188598D+00	0.825957D+00	77.13	0.717811
141.0	-0.918767D+00	0.364312D+00	-158.37	0.976856	141.0	0.182256D+00	0.884235D+00	78.35	0.815089	141.0	0.182256D+00	0.884235D+00	78.35	0.815089
142.0	-0.766855D+00	0.430660D+00	-150.68	0.773535	142.0	0.172031D+00	0.921508D+00	79.51	0.892914	142.0	0.172031D+00	0.921508D+00	79.51	0.892914
143.0	-0.597834D+00	0.492070D+00	-140.58	0.599537	143.0	0.156254D+00	0.958463D+00	80.62	0.903695	143.0	0.156254D+00	0.958463D+00	80.62	0.903695
144.0	-0.414255D+00	0.548933D+00	-127.09	0.471951	144.0	0.141237D+00	0.970906D+00	81.72	0.960859	144.0	0.141237D+00	0.970906D+00	81.72	0.960859
145.0	-0.218988D+00	0.598125D+00	-110.11	0.405770	145.0	0.121367D+00	0.961717D+00	82.81	0.939630	145.0	0.121367D+00	0.961717D+00	82.81	0.939630
146.0	-0.151235D-01	0.642007D+00	-91.35	0.412401	146.0	0.990937D-01	0.931679D+00	83.93	0.877845	146.0	0.990937D-01	0.931679D+00	83.93	0.877845
147.0	0.194039D+00	0.679424D+00	-74.06	0.499269	147.0	0.749262D-01	0.878154D+00	85.12	0.776769	147.0	0.749262D-01	0.878154D+00	85.12	0.776769
148.0	0.405075D+00	0.710212D+00	-60.30	0.668866	148.0	0.494162D-01	0.799621D+00	86.46	0.641836	148.0	0.494162D-01	0.799621D+00	86.46	0.641836
149.0	0.614496D+00	0.734297D+00	-50.08	0.916783	149.0	0.231483D-01	0.694807D+00	88.09	0.483292	149.0	0.231483D-01	0.694807D+00	88.09	0.483292
150.0	0.818818D+00	0.751653D+00	-42.55	1.235445	150.0	-0.327401D-02	0.562718D+00	90.33	0.316663	150.0	-0.327401D-02	0.562718D+00	90.33	0.316663
151.0	0.101663D+01	0.762269D+00	-36.92	1.610716	151.0	-0.292418D-01	0.402669D+00	94.15	0.162998	151.0	-0.292418D-01	0.402669D+00	94.15	0.162998
152.0	0.119867D+01	0.766652D+00	-32.60	2.024574	152.0	-0.541549D-01	0.218304D+00	104.18	0.048859	152.0	-0.541549D-01	0.218304D+00	104.18	0.048859
153.0	0.136789D+01	0.764668D+00	-29.21	2.455834	153.0	-0.774357D-01	-0.236177D-02	-178.24	0.006002	153.0	-0.774357D-01	-0.236177D-02	-178.24	0.006002
154.0	0.151953D+01	0.756726D+00	-26.47	2.891502	154.0	-0.935430D-01	-0.247030D+00	-111.75	0.070734	154.0	-0.935430D-01	-0.247030D+00	-111.75	0.070734
155.0	0.165105D+01	0.743175D+00	-24.23	3.278289	155.0	0.116984D+00	-0.518905D+00	-102.70	0.282948	155.0	0.116984D+00	-0.518905D+00	-102.70	0.282948
156.0	0.176051D+01	0.724413D+00	-22.37	3.624161	156.0	-0.132327D+00	-0.816896D+00	-99.20	0.684829	156.0	-0.132327D+00	-0.816896D+00	-99.20	0.684829
157.0	0.184633D+01	0.700883D+00	-20.79	3.899816	157.0	-0.144211D+00	-0.913951D+01	-97.21	1.319284	157.0	-0.144211D+00	-0.913951D+01	-97.21	1.319284
158.0	0.190708D+01	0.673065D+00	-19.44	4.089976	158.0	-0.152355D+00	-0.148489D+01	-95.86	2.228117	158.0	-0.152355D+00	-0.148489D+01	-95.86	2.228117
159.0	0.194240D+01	0.641468D+00	-18.28	4.184385	159.0	-0.156564D+00	-0.185082D+01	-94.84	3.450046	159.0	-0.156564D+00	-0.185082D+01	-94.84	3.450046
160.0	0.195240D+01	0.606623D+00	-17.26	4.178451	160.0	-0.156735D+00	-0.223474D+01	-94.01	5.018617	160.0	-0.156735D+00	-0.223474D+01	-94.01	5.018617
161.0	0.193639D+01	0.569074D+00	-16.38	4.073467	161.0	-0.152859D+00	-0.263377D+01	-93.32	6.960129	161.0	-0.152859D+00	-0.263377D+01	-93.32	6.960129
162.0	0.189635D+01	0.529388D+00	-15.60	3.876402	162.0	-0.145023D+00	-0.304477D+01	-92.73	9.291660	162.0	-0.145023D+00	-0.304477D+01	-92.73	9.291660
163.0	0.183331D+01	0.488110D+00	-14.91	3.599284	163.0	-0.134050D+00	-0.348432D+01	-92.21	12.019312	163.0	-0.134050D+00	-0.348432D+01	-92.21	12.019312
164.0	0.174514D+01	0.445600D+00	-14.30	3.258222	164.0	-0.118274D+00	-0.388880D+01	-91.74	15.136761	164.0	-0.118274D+00	-0.388880D+01	-91.74	15.136761
165.0	0.164613D+01	0.403002D+00	-13.76	2.872152	165.0	-0.999912D-01	-0.431444D+01	-91.33	18.624222	165.0	-0.999912D-01	-0.431444D+01	-91.33	18.624222
166.0	0.152697D+01	0.360247D+00	-13.27	2.461407	166.0	-0.789539D-01	-0.473726D+01	-90.95	22.447906	166.0	-0.789539D-01	-0.473726D+01	-90.95	22.447906
167.0	0.139466D+01	0.318048D+00	-12.85	2.046238	167.0	-0.556838D-01	-0.515333D+01	-90.62	26.560017	167.0	-0.556838D-01	-0.515333D+01	-90.62	26.560017
168.0	0.125249D+01	0.276893D+00	-12.47	1.645396	168.0	-0.307166D-01	-0.555863D+01	-90.32	30.899343	168.0	-0.307166D-01	-0.555863D+01	-90.32	30.899343
169.0	0.110391D+01	0.237246D+00	-12.13	1.274901	169.0	-0.463898D-02	-0.594915D+01	-90.04	35.392444	169.0	-0.463898D-02	-0.594915D+01	-90.04	35.392444
170.0	0.952507D+00	0.199541D+00	-11.83	0.947087	170.0	0.219355D-01	-0.632099D+01	-89.80	39.955412	170.0	0.219355D-01	-0.632099D+01	-89.80	39.955412
171.0	0.801903D+00	0.164181D+00	-11.57	0.670004	171.0	0.483805D-01	-0.667037D+01	-89.58	44.496166	171.0	0.483805D-01	-0.667037D+01	-89.58	44.496166
172.0	0.655675D+00	0.131532D+00	-11.34	0.447270	172.0	0.740721D-01	-0.699369D+01	-89.39	48.917189	172.0	0.740721D-01	-0.699369D+01	-89.39	48.917189
173.0	0.517281D+00	0.101930D+00	-11.15	0.277969	173.0	0.984035D-01	-0.728759D+01	-89.23	53.118630	173.0	0.984035D-01	-0.728759D+01	-89.23	53.118630
174.0	0.389582D+00	0.756691D-01	-10.98	0.157812	174.0	0.120799D+00	-0.754897D+01	-89.08	57.001616	174.0	0.120799D+00	-0.754897D+01	-89.08	57.001616
175.0	0.276768D+00	0.530080D-01	-10.84	0.079410	175.0	0.140730D+00	-0.777508D+01	-88.96	60.471664	175.0	0.140730D+00	-0.777508D+01	-88.96	60.471664
176.0	0.180293D+00	0.341664D-01	-10.73	0.033673	176.0	0.157724D+00	-0.796349D+01	-88.87	63.442033	176.0	0.157724D+00	-0.796349D+01	-88.87	63.442033
177.0	0.102615D+00	0.193242D-01	-10.64	0.010944	177.0	0.171378D+00	-0.811218D+01	-88.79	65.836866	177.0	0.171378D+00	-0.811218D+01	-88.79	65.836866
178.0	0.461160D+00	0.862208D-02	-10.55	0.002204	178.0	0.181369D+00	-0.821956D+01	-88.74	67.593989	178.0	0.181369D+00	-0.821956D+01	-88.74	67.593989
179.0	0.116037D-01	0.216056D-02	-10.52	0.000139	179.0	0.187460D+00	-0.828445D+01	-88.70	68.667234	179.0	0.187460D+00	-0.828445D+01	-88.70	68.667234
180.0	0.503379D-10	-0.167493D-09	-73.27	0.000000	180.0	0.189506D+00	-0.830616D+01	-88.69	69.028181	180.0	0.189506D+00	-0.830616D+01	-88.69	69.028181

CIRCULAR PP POLARIZATION KA= 9.000

CIRCULAR OP POLARIZATION KA= 9.000

THETA	REAL	IMAG	PHASE	NRCS	THETA	REAL	IMAG	PHASE	NRCS
0.0	-0.649129D+00	0.651031D+00	134.92	0.845210	0.0	0.318154D-11	0.266032D-11	39.90	0.000000
1.0	-0.648890D+00	0.652076D+00	134.86	0.846261	1.0	0.129179D-03	-0.280403D-03	-65.43	0.000000
2.0	-0.648167D+00	0.655194D+00	134.69	0.848400	2.0	0.511460D-03	-0.111450D-02	-65.31	0.000001
3.0	-0.646950D+00	0.660340D+00	134.41	0.854593	3.0	0.114673D-02	-0.246882D-02	-65.10	0.000007
4.0	-0.645219D+00	0.667436D+00	134.03	0.861779	4.0	0.202573D-02	-0.430870D-02	-64.80	0.000023
5.0	-0.642950D+00	0.676378D+00	133.55	0.870871	5.0	0.314105D-02	-0.655981D-02	-64.41	0.000053
6.0	-0.640106D+00	0.687032D+00	132.97	0.881749	6.0	0.447984D-02	-0.915848D-02	-63.93	0.000104
7.0	-0.636646D+00	0.699245D+00	132.32	0.894262	7.0	0.602457D-02	-0.120134D-01	-63.36	0.000181
8.0	-0.632515D+00	0.712640D+00	131.58	0.908221	8.0	0.776215D-02	-0.150273D-01	-62.68	0.000286
9.0	-0.627665D+00	0.727623D+00	130.78	0.923399	9.0	0.966312D-02	-0.180959D-01	-61.90	0.000421
10.0	-0.622016D+00	0.744339D+00	129.92	0.939533	10.0	0.117044D-01	-0.211109D-01	-60.99	0.000583
11.0	-0.615494D+00	0.759924D+00	129.01	0.956318	11.0	0.138533D-01	-0.239628D-01	-59.97	0.000765
12.0	-0.608016D+00	0.777005D+00	128.04	0.973420	12.0	0.160753D-01	-0.265447D-01	-58.80	0.000963
13.0	-0.599486D+00	0.794411D+00	127.04	0.990472	13.0	0.183313D-01	-0.287552D-01	-57.48	0.001163
14.0	-0.589805D+00	0.811923D+00	126.00	1.007089	14.0	0.205785D-01	-0.305011D-01	-55.99	0.001354
15.0	-0.578866D+00	0.829331D+00	124.91	1.022873	15.0	0.227707D-01	-0.317009D-01	-54.31	0.001523
16.0	-0.566552D+00	0.846432D+00	123.80	1.037427	16.0	0.248590D-01	-0.322871D-01	-52.41	0.001660
17.0	-0.552749D+00	0.863039D+00	122.64	1.050368	17.0	0.267925D-01	-0.322083D-01	-50.24	0.001755
18.0	-0.537338D+00	0.878981D+00	121.44	1.061339	18.0	0.285193D-01	-0.314316D-01	-47.78	0.001801
19.0	-0.520197D+00	0.894105D+00	120.15	1.070028	19.0	0.299878D-01	-0.299434D-01	-44.96	0.001796
20.0	-0.501210D+00	0.908277D+00	118.89	1.076179	20.0	0.311474D-01	-0.277505D-01	-41.70	0.001740
21.0	-0.480261D+00	0.921386D+00	117.53	1.079604	21.0	0.319507D-01	-0.248808D-01	-37.91	0.001640
22.0	-0.457240D+00	0.933342D+00	116.10	1.080199	22.0	0.323543D-01	-0.213824D-01	-33.46	0.001504
23.0	-0.432061D+00	0.944073D+00	114.59	1.077951	23.0	0.323206D-01	-0.173233D-01	-26.19	0.001345
24.0	-0.404627D+00	0.953531D+00	112.99	1.072944	24.0	0.318192D-01	-0.127899D-01	-21.90	0.001176
25.0	-0.374873D+00	0.961681D+00	111.30	1.065361	25.0	0.308285D-01	-0.078497D-02	-14.35	0.001013
26.0	-0.342748D+00	0.966509D+00	109.49	1.055885	26.0	0.293370D-01	-0.272552D-02	-5.31	0.000668
27.0	-0.308220D+00	0.974089D+00	107.56	1.043693	27.0	0.273444D-01	0.256032D-02	5.35	0.000754
28.0	-0.271284D+00	0.978187D+00	105.50	1.030445	28.0	0.248627D-01	0.783643D-02	17.49	0.000640
29.0	-0.231915D+00	0.981055D+00	103.30	1.016274	29.0	0.219167D-01	0.129622D-01	30.60	0.000648
30.0	-0.190289D+00	0.982626D+00	100.96	1.001765	30.0	0.185446D-01	0.177963D-01	43.82	0.000661
31.0	-0.146354D+00	0.982911D+00	98.47	0.987534	31.0	0.147979D-01	0.222007D-01	56.31	0.000712
32.0	-0.100260D+00	0.981914D+00	95.83	0.974207	32.0	0.107413D-01	0.260444D-01	67.59	0.000794
33.0	-0.521839D+00	0.979629D+00	93.05	0.962391	33.0	0.585154D-02	0.292071D-01	77.54	0.000895
34.0	-0.217570D-02	0.970035D+00	90.13	0.952650	34.0	0.201645D-02	0.315834D-01	86.35	0.001002
35.0	0.494444D-01	0.971096D+00	87.03	0.943473	35.0	-0.246655D-02	0.330455D-01	94.26	0.001101
36.0	0.102487D+00	0.964752D+00	83.94	0.941251	36.0	-0.689255D-02	0.336465D-01	101.58	0.001180
37.0	0.156644D+00	0.956923D+00	80.70	0.940255	37.0	-0.111514D-01	0.332228D-01	108.55	0.001228
38.0	0.211780D+00	0.947502D+00	77.40	0.942612	38.0	-0.151307D-01	0.317959D-01	115.45	0.001240
39.0	0.267437D+00	0.936360D+00	74.06	0.948293	39.0	-0.187180D-01	0.293739D-01	122.51	0.001213
40.0	0.323338D+00	0.923340D+00	70.70	0.957104	40.0	-0.218047D-01	0.259917D-01	129.99	0.001151
41.0	0.379136D+00	0.908263D+00	67.34	0.968685	41.0	-0.242091D-01	0.217113D-01	138.21	0.001061
42.0	0.434472D+00	0.890928D+00	64.00	0.982518	42.0	-0.260793D-01	0.166205D-01	147.49	0.000956
43.0	0.486977D+00	0.871116D+00	60.69	0.997942	43.0	-0.270969D-01	0.108316D-01	158.21	0.000852
44.0	0.542278D+00	0.848594D+00	57.42	1.014178	44.0	-0.272795D-01	0.447886D-02	170.68	0.000764
45.0	0.594000D+00	0.823119D+00	54.18	1.030362	45.0	-0.265843D-01	-0.228459D-02	-175.09	0.000712

CIRCULAR PP POLARIZATION KA= 9.000					CIRCULAR OP POLARIZATION KA= 9.000				
THETA	REAL	IMAG	PHASE	MBCS	THETA	REAL	IMAG	PHASE	MBCS
45.0	0.594000D+00	0.823119D+00	58.18	1.030362	45.0	-0.265843D-01	-0.228459D-02	-175.09	0.000712
46.0	0.643772D+00	0.794446D+00	50.98	1.045587	46.0	-0.249896D-01	-0.923022D-02	-159.61	0.000711
47.0	0.691227D+00	0.762333D+00	47.80	1.058986	47.0	-0.224975D-01	-0.163588D-01	-143.98	0.000774
48.0	0.736013D+00	0.726549D+00	44.63	1.069589	48.0	-0.191350D-01	-0.235032D-01	-129.39	0.000909
49.0	0.777890D+00	0.686885D+00	41.45	1.076765	49.0	-0.149546D-01	-0.299369D-01	-116.54	0.001120
50.0	0.816232D+00	0.643155D+00	38.24	1.079884	50.0	-0.100350D-01	-0.360758D-01	-105.54	0.001402
51.0	0.851042D+00	0.595215D+00	34.97	1.078553	51.0	-0.448005D-02	-0.415447D-01	-96.15	0.001746
52.0	0.881936D+00	0.542962D+00	31.62	1.072619	52.0	0.158259D-02	-0.461829D-01	-89.04	0.002135
53.0	0.908659D+00	0.486347D+00	28.16	1.062195	53.0	0.803272D-02	-0.498484D-01	-80.88	0.002549
54.0	0.930980D+00	0.425383D+00	24.56	1.047674	54.0	0.146134D-01	-0.528228D-01	-74.42	0.002962
55.0	0.948691D+00	0.360151D+00	20.79	1.029724	55.0	0.212291D-01	-0.538154D-01	-68.47	0.003347
56.0	0.961614D+00	0.290806D+00	16.83	1.009270	56.0	0.276550D-01	-0.539662D-01	-62.87	0.003677
57.0	0.969594D+00	0.217584D+00	12.65	0.987456	57.0	0.336895D-01	-0.528489D-01	-57.48	0.003928
58.0	0.972502D+00	0.140802D+00	8.24	0.965585	58.0	0.391297D-01	-0.504727D-01	-52.21	0.004079
59.0	0.970232D+00	0.060656D-01	3.59	0.945055	59.0	0.437768D-01	-0.468827D-01	-46.96	0.004114
60.0	0.962704D+00	-0.217352D-01	-1.29	0.927272	60.0	0.474423D-01	-0.421597D-01	-41.63	0.004028
61.0	0.949853D+00	-0.106424D+00	-6.39	0.913557	61.0	0.499534D-01	-0.364195D-01	-36.09	0.003822
62.0	0.931659D+00	-0.192542D+00	-11.68	0.905060	62.0	0.511588D-01	-0.298099D-01	-30.23	0.003506
63.0	0.908089D+00	-0.279353D+00	-17.10	0.902662	63.0	0.509344D-01	-0.225077D-01	-23.84	0.003101
64.0	0.879151D+00	-0.366051D+00	-22.61	0.906900	64.0	0.491875D-01	-0.147141D-01	-16.65	0.002636
65.0	0.844873D+00	-0.453766D+00	-28.13	0.917903	65.0	0.458620D-01	-0.664992D-02	-8.25	0.002188
66.0	0.805301D+00	-0.535578D+00	-33.63	0.935353	66.0	0.409414D-01	0.145080D-02	2.03	0.001678
67.0	0.760503D+00	-0.616528D+00	-39.03	0.958472	67.0	0.344517D-01	0.934721D-02	15.18	0.001274
68.0	0.710574D+00	-0.693531D+00	-44.31	0.986039	68.0	0.264631D-01	0.167988D-01	32.41	0.000982
69.0	0.656338D+00	-0.765897D+00	-49.44	1.016444	69.0	0.170901D-01	0.235725D-01	54.06	0.000848
70.0	0.595832D+00	-0.832320D+00	-54.40	1.047772	70.0	0.649314D-02	0.234507D-01	77.57	0.000909
71.0	0.531354D+00	-0.891952D+00	-59.22	1.077915	71.0	-0.513230D-02	0.342379D-01	98.53	0.001199
72.0	0.462422D+00	-0.943862D+00	-63.90	1.104710	72.0	-0.175416D-01	0.377677D-01	114.91	0.001734
73.0	0.389300D+00	-0.987185D+00	-68.48	1.126089	73.0	-0.304625D-01	0.399096D-01	127.35	0.002521
74.0	0.312302D+00	-0.102113D+01	-72.99	1.140240	74.0	-0.435922D-01	0.405740D-01	137.05	0.003547
75.0	0.211930D+00	-0.104500D+01	-77.49	1.145759	75.0	-0.566056D-01	0.357168D-01	144.94	0.004782
76.0	0.148198D+00	-0.105822D+01	-82.0	1.141783	76.0	-0.691628D-01	0.373432D-01	151.63	0.006178
77.0	0.620011D-01	-0.106031D+01	-86.0	1.128096	77.0	-0.809175D-01	0.345091D-01	157.50	0.007670
78.0	-0.262470D-01	-0.105096D+01	-91.43	1.105197	78.0	-0.915259D-01	0.283217D-01	162.81	0.009179
79.0	-0.115918D+00	-0.102999D+01	-96.42	1.074310	79.0	-0.105656D+00	0.219391D-01	167.70	0.010613
80.0	-0.205318D+00	-0.997388D+00	-101.69	1.037349	80.0	-0.107996D+00	0.145669D-01	172.32	0.011875
81.0	-0.236689D+00	-0.953309D+00	-107.29	0.996822	81.0	-0.113263D+00	0.645427D-02	176.74	0.012871
82.0	-0.386192D+00	-0.898071D+00	-113.27	0.955672	82.0	-0.116224D+00	-0.211160D-02	-178.96	0.013572
83.0	-0.473924D+00	-0.832168D+00	-119.66	0.917107	83.0	-0.116675D+00	-0.108131D-01	-174.71	0.013730
84.0	-0.558922D+00	-0.756258D+00	-126.47	0.884320	84.0	-0.114480D+00	-0.193108D-01	-170.43	0.013479
85.0	-0.640168D+00	-0.671167D+00	-133.65	0.860280	85.0	-0.109559D+00	-0.272529D-01	-166.03	0.012746
86.0	-0.716600D+00	-0.57875D+00	-141.12	0.847455	86.0	-0.101900D+00	-0.342861D-01	-161.40	0.011559
87.0	-0.787128D+00	-0.477504D+00	-148.76	0.847581	87.0	-0.915579D-01	-0.400669D-01	-156.37	0.009988
88.0	-0.850646D+00	-0.371309D+00	-156.42	0.861469	88.0	-0.786575D-01	-0.442736D-01	-150.63	0.008147
89.0	-0.906050D+00	-0.260650D+00	-163.95	0.888869	89.0	-0.633947D-01	-0.466172D-01	-143.67	0.006192
90.0	-0.952261D+00	-0.147005D+00	-171.27	0.928412	90.0	-0.460332D-01	-0.468536D-01	-134.49	0.004314

CIRCULAR PP POLARIZATION KA= 9.000					CIRCULAR OP POLARIZATION KA= 9.000				
THETA	REAL	IMAG	PHASE	NRCS	THETA	REAL	IMAG	PHASE	NRCS
90.0	-0.95226D+00	-0.147005D+00	-171.22	0.928412	90.0	-0.460332D-01	-0.468536D-01	-138.49	0.00437
91.0	-0.98823D+00	-0.31889D-01	-178.15	0.97642	91.0	-0.269001D-01	-0.447941D-01	-120.99	0.002730
92.0	-0.101303D+01	0.831133D-01	175.31	1.033139	92.0	-0.438070D-02	-0.403146D-01	-99.99	0.001666
93.0	-0.102575D+01	0.196398D+00	169.16	1.090736	93.0	0.150897D-01	-0.333688D-01	-65.66	0.001341
94.0	-0.102565D+01	0.306363D+00	163.37	1.145914	94.0	0.370350D-01	-0.239740D-01	-32.92	0.001946
95.0	-0.101212D+01	0.411437D+00	157.88	1.193660	95.0	0.589487D-01	-0.122561D-01	-11.75	0.003625
96.0	-0.984712D+00	0.510103D+00	152.61	1.229716	96.0	0.803966D-01	0.158787D-02	1.13	0.006452
97.0	-0.943162D+00	0.600925D+00	147.50	1.250716	97.0	0.100579D+00	0.172704D-01	9.74	0.010414
98.0	-0.887514D+00	0.682574D+00	142.44	1.253583	98.0	0.119244D+00	0.344197D-01	16.10	0.015404
99.0	-0.817887D+00	0.753851D+00	137.33	1.237230	99.0	0.135804D+00	0.525853D-01	21.17	0.021208
100.0	-0.734757D+00	0.813707D+00	132.08	1.201986	100.0	0.149794D+00	0.712463D-01	25.44	0.027514
101.0	-0.638631D+00	0.861265D+00	126.57	1.149882	101.0	0.160800D+00	0.898219D-01	29.19	0.033925
102.0	-0.531084D+00	0.895834D+00	120.66	1.084568	102.0	0.168486D+00	0.107685D+00	32.5	0.039978
103.0	-0.412755D+00	0.916923D+00	114.23	1.011115	103.0	0.172519D+00	0.124177D+00	35.75	0.045183
104.0	-0.285346D+00	0.924253D+00	107.16	0.935666	104.0	0.172752D+00	0.138626D+00	38.75	0.050600
105.0	-0.150608D+00	0.917759D+00	99.32	0.864944	105.0	0.169058D+00	0.150367D+00	41.65	0.051191
106.0	-0.105233D-01	0.897595D+00	90.67	0.805787	106.0	0.161423D+00	0.158758D+00	44.52	0.051261
107.0	0.132719D+00	0.864133D+00	81.27	0.763340	107.0	0.149930D+00	0.163208D+00	47.43	0.049116
108.0	0.276755D+00	0.817977D+00	71.31	0.745647	108.0	0.134763D+00	0.163191D+00	50.45	0.044792
109.0	0.419081D+00	0.759852D+00	61.12	0.753004	109.0	0.116200D+00	0.158270D+00	53.71	0.038552
110.0	0.557100D+00	0.690795D+00	51.12	0.747559	110.0	0.946130D-01	0.148119D+00	57.43	0.030671
111.0	0.688170D+00	0.611935D+00	41.64	0.84043	111.0	0.704591D-01	0.132535D+00	62.00	0.022530
112.0	0.809655D+00	0.524976D+00	32.94	0.930727	112.0	0.442699D-01	0.111460D+00	68.34	0.014383
113.0	0.918981D+00	0.430154D+00	25.08	1.029558	113.0	0.164033D-01	0.849877D-01	78.92	0.007500
114.0	0.101370D+01	0.330213D+00	12.04	1.136620	114.0	-0.117851D-01	0.533639D-01	102.45	0.032989
115.0	0.109153D+01	0.226376D+00	11.72	1.242683	115.0	-0.403286D-01	0.170734D-01	157.05	0.001918
116.0	0.115045D+01	0.120323D+00	5.97	1.338012	116.0	-0.682955D-01	-0.233397D-01	-161.13	0.005209
117.0	0.118872D+01	0.137564D-01	0.66	1.413245	117.0	-0.949925D-01	-0.670852D-01	-144.77	0.013524
118.0	0.120495D+01	-0.916253D-01	-4.35	1.460310	118.0	-0.119746D+00	-0.113232D+00	-136.60	0.027161
119.0	0.119816D+01	-0.194156D+00	-9.20	1.473286	119.0	-0.141919D+00	-0.160703D+00	-131.45	0.045966
120.0	0.116779D+01	-0.292230D+00	-14.05	1.449127	120.0	-0.160931D+00	-0.208289D+00	-127.69	0.059283
121.0	0.113750D+01	-0.384331D+00	-19.04	1.388158	121.0	-0.176272D+00	-0.254675D+00	-124.69	0.095931
122.0	0.103647D+01	-0.469052D+00	-24.35	1.294286	122.0	-0.187518D+00	-0.298466D+00	-122.14	0.124245
123.0	0.936868D+00	-0.545123D+00	-30.19	1.174881	123.0	-0.194345D+00	-0.338217D+00	-119.88	0.152161
124.0	0.816372D+00	-0.611428D+00	-36.03	1.040308	124.0	-0.196537D+00	-0.372470D+00	-117.82	0.177361
125.0	0.676919D+00	-0.667024D+00	-44.58	0.903141	125.0	-0.193996D+00	-0.399788D+00	-115.88	0.197465
126.0	0.520922D+00	-0.711152D+00	-53.78	0.777097	126.0	-0.186745D+00	-0.419798D+00	-114.03	0.210266
127.0	0.351236D+00	-0.743289D+00	-64.71	0.675785	127.0	-0.174930D+00	-0.428229D+00	-112.22	0.213981
128.0	0.171113D+00	-0.762953D+00	-77.36	0.611377	128.0	-0.158817D+00	-0.426955D+00	-110.40	0.207514
129.0	-0.158537D-01	-0.770108D+00	-91.18	0.593317	129.0	-0.138786D+00	-0.414037D+00	-108.53	0.190689
130.0	-0.205806D-01	-0.764761D+00	-105.06	0.627215	130.0	-0.115324D+00	-0.388759D+00	-106.57	0.164434
131.0	-0.394695D+00	-0.747158D+00	-117.85	0.714029	131.0	-0.890162D-01	-0.350665D+00	-104.24	0.130491
132.0	-0.578365D+00	-0.717737D+00	-128.48	0.849653	132.0	-0.605246D-01	-0.299595D+00	-101.42	0.093420
133.0	-0.752653D+00	-0.677114D+00	-138.02	1.024971	133.0	-0.305701D-01	-0.215707D+00	-97.39	0.056492
134.0	-0.913477D+00	-0.626073D+00	-145.57	1.224609	134.0	-0.763460D-04	-0.159505D+00	-89.97	0.025442
135.0	-0.105694D+01	-0.535545D+00	-151.85	1.434964	135.0	0.306229D-01	-0.718226D-01	-66.92	0.006101

CIRCULAR PP POLARIZATION KA= 9.000					CIRCULAR OP POLARIZATION KA= 9.000				
THETA	REAL	IMAG	PHASE	MCS	THETA	REAL	IMAG	PHASE	MCS
135.0	-0.105694D+01	-0.565545D+00	-151.85	1.836968	135.0	0.306229D-01	-0.718526D-01	-66.92	0.006101
136.0	-0.117982D+01	-0.496589D+00	-157.17	1.837639	136.0	0.502752D-01	0.260187D-01	23.35	0.004310
137.0	-0.127768D+01	-0.420375D+00	-161.79	1.839175	137.0	0.682598D-01	0.132508D+00	56.33	0.025348
138.0	-0.134892D+01	-0.338158D+00	-165.93	1.839397	138.0	0.113842D+00	0.245651D+00	65.14	0.073305
139.0	-0.139089D+01	-0.251257D+00	-169.76	1.997704	139.0	0.136352D+00	0.363140D+00	69.42	0.150463
140.0	-0.140195D+01	-0.161029D+00	-173.45	1.991398	140.0	0.155203D+00	0.482341D+00	72.16	0.256741
141.0	-0.138112D+01	-0.688457D-01	-177.15	1.912225	141.0	0.169899D+00	0.603332D+00	74.20	0.389265
142.0	-0.132810D+01	0.23923D-01	178.97	1.764425	142.0	0.180063D+00	0.713944D+00	75.81	0.542139
143.0	-0.124334D+01	0.115952D+00	174.67	1.559339	143.0	0.185439D+00	0.819806D+00	77.25	0.706470
144.0	-0.112800D+01	0.205949D+00	169.65	1.314798	144.0	0.185923D+00	0.914402D+00	78.51	0.870691
145.0	-0.98391D+00	0.292702D+00	163.43	1.053823	145.0	0.181468D+00	0.994133D+00	79.66	1.021232
146.0	-0.013789D+00	0.375087D+00	155.25	0.802944	146.0	0.172363D+00	0.105238D+01	80.73	1.143518
147.0	-0.620686D+00	0.452083D+00	153.93	0.569630	147.0	0.158630D+00	0.104591D+01	81.75	1.223298
148.0	-0.408420D+00	0.522784D+00	128.00	0.440110	148.0	0.140916D+00	0.110813D+01	82.75	1.288239
149.0	-0.18127D+00	0.586413D+00	107.18	0.376731	149.0	0.119563D+00	0.109334D+01	83.75	1.209715
150.0	0.56189CD-01	0.642326D+00	85.00	0.415741	150.0	0.954930D-01	0.104668D+01	84.79	1.104666
151.0	0.298965D+00	0.690023D+00	66.57	0.565511	151.0	0.691110D-01	0.965734D+00	85.91	0.937428
152.0	0.541996D+00	0.723142D+00	53.36	0.825407	152.0	0.412861D-01	0.848287D+00	87.21	0.721295
153.0	0.780160D+00	0.759467D+00	44.23	1.185440	153.0	0.128208D-01	0.692614D+00	88.94	0.479878
154.0	0.100843D+01	0.780928D+00	37.75	1.626766	154.0	-0.154524D-01	0.492516D+00	91.78	0.247761
155.0	0.122196D+01	0.793573D+00	33.00	2.123002	155.0	-0.427195D-01	0.262374D+00	99.25	0.070665
156.0	0.141636D+01	0.7971605D+00	29.35	2.682260	156.0	-0.318679D-01	-0.128126D-01	-169.26	0.004814
157.0	0.158756D+01	0.793334D+00	26.55	3.189715	157.0	-0.911204D-01	-0.327403D+00	-105.55	0.115496
158.0	0.173212D+01	0.781186D+00	24.28	3.610484	158.0	-0.110590D-01	-0.680088D+00	-99.26	0.474010
159.0	0.184726D+01	0.761685D+00	22.41	3.922544	159.0	-0.126836D+00	-0.106889D+01	-96.77	1.158620
160.0	0.193094D+01	0.735449D+00	20.85	4.269411	160.0	-0.138595D+00	-0.149118D+01	-95.31	2.242836
161.0	0.198189D+01	0.703170D+00	19.53	4.482232	161.0	-0.145006D+00	-0.194368D+01	-94.29	3.799157
162.0	0.199671D+01	0.665601D+00	18.41	4.481723	162.0	-0.148271D+00	-0.242250D+01	-93.50	5.890509
163.0	0.198471D+01	0.623550D+00	17.44	4.327905	163.0	-0.145937D+00	-0.292300D+01	-92.86	8.566404
164.0	0.193825D+01	0.577855D+00	16.60	4.090744	164.0	-0.138888D+00	-0.344082D+01	-91.31	11.858524
165.0	0.186235D+01	0.529384D+00	15.87	3.748576	165.0	-0.127353D+00	-0.394966D+01	-89.84	15.776798
166.0	0.175979D+01	0.479009D+00	15.23	3.326325	166.0	-0.111692D+00	-0.450466D+01	-91.42	20.306275
167.0	0.163409D+01	0.427606D+00	14.66	2.853082	167.0	-0.92372D-01	-0.503949D+01	-91.05	25.805036
168.0	0.148929D+01	0.376035D+00	14.17	2.359360	168.0	-0.700304D-01	-0.556763D+01	-90.72	31.003354
169.0	0.132986D+01	0.325131D+00	13.74	1.874492	169.0	-0.453040D-01	-0.608294D+01	-90.43	37.004258
170.0	0.116099D+01	0.275699D+00	13.36	1.423902	170.0	-0.139608D-01	-0.657915D+01	-90.17	43.285558
171.0	0.987509D+00	0.224495D+00	13.03	1.027386	171.0	0.819489D-02	-0.705005D+01	-89.93	49.703309
172.0	0.814726D+00	0.184242D+00	12.74	0.697723	172.0	0.353493D-01	-0.748968D+01	-89.73	56.086622
173.0	0.647782D+00	0.143560D+00	12.50	0.440237	173.0	0.616680D-01	-0.789230D+01	-89.55	62.293609
174.0	0.491620D+00	0.1103D+00	12.29	0.253161	174.0	0.863565D-01	-0.825292D+01	-89.40	68.118193
175.0	0.350838D+00	0.73325D-01	12.12	0.128762	175.0	0.106666D+00	-0.85654D+01	-89.27	73.397454
176.0	0.229571D+00	0.467154D-01	11.98	0.055076	176.0	0.127922D+00	-0.882099D+01	-89.17	77.969116
177.0	0.131369D+00	0.276232D-01	11.87	0.048021	177.0	0.143359D+00	-0.903704D+01	-89.09	81.688779
178.0	0.591042D-01	0.123472D-01	11.80	0.003646	178.0	0.155044D+00	-0.93763D+01	-89.03	84.434499
179.0	0.148945D-01	0.309737D-02	11.76	0.000231	179.0	0.162090D+00	-0.927880D+01	-89.00	86.122335
180.0	0.658851D-10	0.578282D-10	11.32	0.000000	180.0	0.164463D+00	-0.930932D+01	-88.99	86.690571

CIRCULAR PP POLARIZATION KA= 10.000

TETA	REAL	IMAG	PHASE	MCS	TETA	REAL	IMAG	PHASE	MCS
0.0	-0.403835D+00	-0.875298D+00	-114.77	0.929230	0.0	-0.134739D-10	0.611172D-11	155.60	0.000000
1.0	-0.404339D+00	-0.875633D+00	-114.78	0.930207	1.0	-0.117848D-03	0.306441D-03	111.04	0.000000
2.0	-0.405770D+00	-0.876615D+00	-114.84	0.933104	2.0	-0.470292D-03	0.121377D-02	111.18	0.000002
3.0	-0.408191D+00	-0.878183D+00	-114.93	0.937826	3.0	-0.105393D-02	0.268751D-02	111.41	0.000008
4.0	-0.411581D+00	-0.880236D+00	-115.06	0.944215	4.0	-0.186289D-02	0.466994D-02	111.75	0.000025
5.0	-0.415943D+00	-0.882636D+00	-115.23	0.952054	5.0	-0.288815D-02	0.708400D-02	112.18	0.000059
6.0	-0.421282D+00	-0.885209D+00	-115.45	0.961075	6.0	-0.411870D-02	0.983492D-02	112.72	0.000114
7.0	-0.427604D+00	-0.887757D+00	-115.72	0.970958	7.0	-0.553804D-02	0.128136D-01	113.37	0.000195
8.0	-0.434915D+00	-0.890054D+00	-116.04	0.981348	8.0	-0.712671D-02	0.159066D-01	114.14	0.000304
9.0	-0.443728D+00	-0.891857D+00	-116.43	0.991861	9.0	-0.886036D-02	0.189697D-01	115.04	0.000438
10.0	-0.452556D+00	-0.892912D+00	-116.88	1.002098	10.0	-0.107097D-01	0.218929D-01	116.07	0.000594
11.0	-0.462915D+00	-0.892956D+00	-117.40	1.011660	11.0	-0.126404D-01	0.248885D-01	117.25	0.000762
12.0	-0.474332D+00	-0.891729D+00	-118.01	1.020165	12.0	-0.146128D-01	0.268059D-01	118.60	0.000932
13.0	-0.486806D+00	-0.888979D+00	-118.71	1.027263	13.0	-0.165825D-01	0.285695D-01	120.13	0.001091
14.0	-0.500381D+00	-0.884639D+00	-119.50	1.032656	14.0	-0.185004D-01	0.297431D-01	121.88	0.001227
15.0	-0.515073D+00	-0.877959D+00	-120.40	1.036112	15.0	-0.203140D-01	0.302531D-01	123.88	0.001328
16.0	-0.530901D+00	-0.869268D+00	-121.41	1.037483	16.0	-0.219678D-01	0.300479D-01	126.17	0.001385
17.0	-0.547882D+00	-0.858219D+00	-122.55	1.037115	17.0	-0.234049D-01	0.298997D-01	128.81	0.001395
18.0	-0.566026D+00	-0.844871D+00	-123.83	1.033855	18.0	-0.245688D-01	0.274064D-01	131.87	0.001355
19.0	-0.585334D+00	-0.828517D+00	-125.24	1.029057	19.0	-0.258046D-01	0.249921D-01	135.47	0.001270
20.0	-0.605795D+00	-0.809485D+00	-126.80	1.022578	20.0	-0.258617D-01	0.219070D-01	139.73	0.001149
21.0	-0.627382D+00	-0.786139D+00	-128.52	1.014771	21.0	-0.258949D-01	0.182266D-01	144.86	0.001003
22.0	-0.650051D+00	-0.763760D+00	-130.40	1.006074	22.0	-0.254750D-01	0.140495D-01	151.12	0.000846
23.0	-0.673735D+00	-0.736929D+00	-132.44	0.996983	23.0	-0.245524D-01	0.949470D-02	158.86	0.000693
24.0	-0.698344D+00	-0.707359D+00	-134.63	0.986041	24.0	-0.231345D-01	0.469830D-02	168.52	0.000557
25.0	-0.723759D+00	-0.675256D+00	-136.99	0.979797	25.0	-0.212122D-01	-0.190732D-03	-179.48	0.000450
26.0	-0.749832D+00	-0.640733D+00	-139.49	0.972786	26.0	-0.187987D-01	-0.501527D-02	-165.06	0.000379
27.0	-0.776383D+00	-0.603922D+00	-142.12	0.967493	27.0	-0.159227D-01	-0.961503D-02	-148.87	0.000346
28.0	-0.803202D+00	-0.564969D+00	-144.88	0.964324	28.0	-0.126292D-01	-0.138320D-01	-132.40	0.000351
29.0	-0.830043D+00	-0.524029D+00	-147.73	0.963578	29.0	-0.897897D-02	-0.175156D-01	-117.14	0.000387
30.0	-0.856662D+00	-0.481260D+00	-150.67	0.965425	30.0	-0.504797D-02	-0.202830D-01	-103.82	0.000447
31.0	-0.882652D+00	-0.436820D+00	-153.67	0.969895	31.0	-0.926060D-03	-0.227505D-01	-92.33	0.000518
32.0	-0.907774D+00	-0.390860D+00	-156.70	0.976825	32.0	0.328497D-02	-0.240851D-01	-82.23	0.000591
33.0	-0.931633D+00	-0.343522D+00	-159.76	0.985947	33.0	0.747395D-02	-0.244615D-01	-73.01	0.000654
34.0	-0.952845D+00	-0.298936D+00	-162.82	0.996807	34.0	0.115238D-01	-0.238387D-01	-64.20	0.000701
35.0	-0.974008D+00	-0.245217D+00	-165.87	1.008824	35.0	0.153128D-01	-0.222079D-01	-55.41	0.000728
36.0	-0.991712D+00	-0.194464D+00	-168.91	1.021309	36.0	0.187230D-01	-0.195936D-01	-46.30	0.000734
37.0	-0.100654D+01	-0.142759D+00	-171.93	1.033505	37.0	0.216399D-01	-0.160539D-01	-36.57	0.000726
38.0	-0.101808D+01	-0.901725D-01	-174.94	1.044621	38.0	0.239586D-01	-0.116798D-01	-25.99	0.000710
39.0	-0.102593D+01	-0.367599D-01	-177.95	1.053884	39.0	0.255982D-01	-0.659292D-02	-14.45	0.000698
40.0	-0.102970D+01	0.174299D-01	-179.03	1.060591	40.0	0.264552D-01	-0.942896D-03	-2.04	0.000701
41.0	-0.102004D+01	0.723521D-01	-175.98	1.064153	41.0	0.265074D-01	0.509711D-02	10.88	0.000729
42.0	-0.102361D+01	0.127960D+00	-172.87	1.064148	42.0	0.257172D-01	0.113352D-01	23.79	0.000750
43.0	-0.101313D+01	0.184197D+00	-169.70	1.060356	43.0	0.240839D-01	0.116798D-01	36.11	0.000889
44.0	-0.997354D+00	0.240991D+00	-166.42	1.052791	44.0	0.216355D-01	0.235303D-01	47.46	0.001024
45.0	-0.976098D+00	0.298247D+00	-163.01	1.041718	45.0	0.184294D-01	0.291652D-01	57.71	0.001150

CIRCULAR PP POLARIZATION KA= 10.000 CIRCULAR CP POLARIZATION KA= 10.000

THETA	REAL	IMAG	PHASE	NRCS	THETA	REAL	IMAG	PHASE	NRCS
45.0	-0.976098D+00	0.298247D+00	163.01	1.041718	45.0	0.184294D-01	0.291520D-01	57.71	0.001190
46.0	-0.949228D+00	0.355839D+00	159.45	1.027655	46.0	0.145524D-01	0.341180D-01	66.90	0.001376
47.0	-0.916674D+00	0.413600D+00	155.72	1.011356	47.0	0.101194D-01	0.382499D-01	75.18	0.001565
48.0	-0.878429D+00	0.471319D+00	151.78	0.993779	48.0	0.527072D-02	0.413320D-01	82.74	0.001741
49.0	-0.834520D+00	0.528734D+00	147.64	0.976037	49.0	0.169447D-03	0.434079D-01	89.78	0.001884
50.0	-0.785169D+00	0.585524D+00	143.29	0.959330	50.0	-0.500354D-02	0.441871D-01	96.46	0.001978
51.0	-0.730472D+00	0.641310D+00	138.72	0.944868	51.0	-0.100546D-01	0.436617D-01	102.97	0.002007
52.0	-0.670716D+00	0.695649D+00	133.95	0.933787	52.0	-0.147834D-01	0.418039D-01	109.48	0.001966
53.0	-0.606218D+00	0.748036D+00	129.02	0.927058	53.0	-0.189897D-01	0.386295D-01	116.18	0.001853
54.0	-0.537351D+00	0.797908D+00	123.96	0.925404	54.0	-0.224802D-01	0.341946D-01	123.32	0.001675
55.0	-0.464584D+00	0.844646D+00	118.81	0.929228	55.0	-0.250760D-01	0.286148D-01	131.23	0.001448
56.0	-0.383270D+00	0.887582D+00	113.63	0.938556	56.0	-0.266196D-01	0.220233D-01	140.40	0.001194
57.0	-0.309045D+00	0.926011D+00	108.46	0.953004	57.0	-0.269820D-01	0.146071D-01	151.57	0.000941
58.0	-0.227424D+00	0.959198D+00	103.34	0.971781	58.0	-0.260688D-01	0.658165D-02	165.83	0.000723
59.0	-0.143987D+00	0.986397D+00	98.30	0.993711	59.0	-0.238256D-01	-0.181142D-02	-175.65	0.000571
60.0	-0.593440D-01	0.100666D+01	93.37	1.017295	60.0	-0.202426D-01	-0.103119D-01	-153.01	0.000516
61.0	0.358809D-01	0.101987D+01	88.55	1.040810	61.0	-0.153573D-01	-0.126494D-01	-129.47	0.000584
62.0	0.111048D+00	0.102474D+01	83.82	1.062423	62.0	-0.925662D-02	-0.265528D-01	-109.22	0.000791
63.0	0.195509D+00	0.102064D+01	79.16	1.080331	63.0	-0.207627D-02	-0.337594D-01	-93.52	0.001144
64.0	0.278611D+00	0.100761D+01	74.54	1.092911	64.0	0.600052D-02	-0.400247D-01	-81.47	0.001638
65.0	0.359701D+00	0.984622D+00	69.93	1.098866	65.0	0.147467D-02	-0.451314D-01	-71.91	0.002254
66.0	0.438126D+00	0.951529D+00	65.28	1.097362	66.0	0.238964D-01	-0.486983D-01	-63.96	0.002962
67.0	0.513260D+00	0.908138D+00	60.53	1.088126	67.0	0.331520D-01	-0.511875D-01	-57.07	0.003719
68.0	0.584390D+00	0.854406D+00	55.63	1.071521	68.0	0.421924D-01	-0.519114D-01	-50.90	0.004475
69.0	0.650953D+00	0.790455D+00	50.52	1.048559	69.0	0.506824D-01	-0.510156D-01	-45.20	0.005173
70.0	0.712297D+00	0.716588D+00	45.17	1.020866	70.0	0.582833D-01	-0.485875D-01	-39.82	0.005758
71.0	0.767809D+00	0.633290D+00	39.52	0.990587	71.0	0.646648D-01	-0.446473D-01	-34.62	0.006175
72.0	0.816844D+00	0.541238D+00	33.53	0.960238	72.0	0.695159D-01	-0.393534D-01	-29.52	0.006381
73.0	0.858938D+00	0.441297D+00	27.19	0.932517	73.0	0.725572D-01	-0.329095D-01	-24.40	0.006348
74.0	0.893402D+00	0.334519D+00	20.53	0.910065	74.0	0.735517D-01	-0.255500D-01	-19.16	0.006063
75.0	0.919734D+00	0.222129D+00	13.58	0.895251	75.0	0.723157D-01	-0.175626D-01	-13.65	0.005538
76.0	0.937421D+00	0.105517D+00	6.42	0.889892	76.0	0.687274D-01	-0.926415D-02	-7.68	0.004809
77.0	0.945902D+00	-0.137480D-01	-0.83	0.894087	77.0	0.627349D-01	-0.892216D-03	-0.91	0.003937
78.0	0.945014D+00	-0.134122D+00	-8.08	0.911040	78.0	0.543621D-01	0.690669D-02	7.24	0.003003
79.0	0.934124D+00	-0.253744D+00	-15.20	0.936974	79.0	0.437113D-01	0.140904D-01	17.87	0.002109
80.0	0.913022D+00	-0.370837D+00	-22.11	0.971130	80.0	0.309650D-01	0.202348D-01	33.16	0.001368
81.0	0.881494D+00	-0.483555D+00	-28.75	1.010658	81.0	0.163837D-01	0.250470D-01	56.81	0.000896
82.0	0.839426D+00	-0.590053D+00	-35.10	1.052798	82.0	0.301881D-03	0.282789D-01	89.39	0.000800
83.0	0.786815D+00	-0.688530D+00	-41.19	1.093151	83.0	-0.168791D-01	0.297389D-01	118.58	0.001169
84.0	0.723791D+00	-0.777260D+00	-47.04	1.128007	84.0	-0.347007D-01	0.293024D-01	139.82	0.002063
85.0	0.650628D+00	-0.858636D+00	-52.72	1.153719	85.0	-0.526589D-01	0.269203D-01	152.92	0.003498
86.0	0.567760D+00	-0.919230D+00	-58.30	1.167280	86.0	-0.702184D-01	0.226253D-01	162.14	0.005443
87.0	0.475794D+00	-0.969685D+00	-63.85	1.166669	87.0	-0.868285D-01	0.165347D-01	169.22	0.007813
88.0	0.375520D+00	-0.100502D+01	-69.51	1.151123	88.0	-0.101939D+00	0.685114D-02	175.04	0.010470
89.0	0.267918D+00	-0.102447D+01	-75.34	1.121315	89.0	-0.115021D+00	-0.140733D-03	-179.93	0.013230
90.0	0.154164D+00	-0.102744D+01	-81.47	1.079394	90.0	-0.125579D+00	-0.100806D-01	-175.41	0.015872

CIRCULAR PP POLARIZATION KA= 10.000

THETA	REAL	IMAG	PHASE	NRCS	THETA	REAL	IMAG	PHASE	NRCS
90.0	0.154168D+00	-0.102784D+01	-81.47	1.079394	90.0	-0.125579D+00	-0.100806D-01	-175.41	0.015872
91.0	0.356243D+01	-0.101371D+01	-87.99	1.028878	91.0	-0.133175D+00	-0.205420D-01	-171.23	0.018158
92.0	-0.881436D+01	-0.983354D+00	-95.01	0.974806	92.0	-0.137481D+00	-0.310453D-01	-167.27	0.019854
93.0	-0.209409D+00	-0.936744D+00	-102.60	0.921342	93.0	-0.138098D+00	-0.410731D-01	-163.44	0.020757
94.0	-0.322810D+00	-0.874569D+00	-110.80	0.875281	94.0	-0.134951D+00	-0.500894D-01	-159.64	0.020721
95.0	-0.452736D+00	-0.797820D+00	-119.57	0.841486	95.0	-0.127936D+00	-0.575547D-01	-155.78	0.019680
96.0	-0.568648D+00	-0.707779D+00	-128.78	0.824311	96.0	-0.117090D+00	-0.629574D-01	-151.73	0.017674
97.0	-0.677821D+00	-0.606300D+00	-138.20	0.826677	97.0	-0.102572D+00	-0.658258D-01	-147.31	0.014854
98.0	-0.778036D+00	-0.494279D+00	-147.57	0.848652	98.0	-0.846615D-01	-0.657533D-01	-142.16	0.011891
99.0	-0.867093D+00	-0.374627D+00	-156.63	0.892372	99.0	-0.637504D-01	-0.624233D-01	-135.60	0.007961
100.0	-0.942880D+00	-0.249223D+00	-165.19	0.931136	100.0	-0.403387D-01	-0.556193D-01	-125.95	0.004721
101.0	-0.100340D+01	-0.120384D+00	-173.16	1.021295	101.0	-0.150209D-01	-0.452532D-01	-108.36	0.002273
102.0	-0.104684D+01	0.949119D-02	-179.48	1.095955	102.0	0.115289D-01	-0.313686D-01	-69.82	0.001117
103.0	-0.107164D+01	0.137965D+00	-172.46	1.167445	103.0	0.135753D-01	-0.141548D-01	-20.15	0.001588
104.0	-0.107654D+01	0.262617D+00	-166.29	1.227914	104.0	0.653429D-01	0.604985D-02	5.29	0.004306
105.0	-0.106064D+01	0.381084D+00	-160.24	1.270183	105.0	0.910390D-01	0.287574D-01	17.53	0.009115
106.0	-0.102342D+01	0.491118D+00	-154.36	1.288589	106.0	0.114879D+00	0.533390D-01	24.91	0.016042
107.0	-0.944821D+00	0.590634D+00	-148.53	1.279729	107.0	0.136109D+00	0.790330D-01	30.14	0.024772
108.0	-0.885249D+00	0.677751D+00	-142.56	1.243012	108.0	0.154034D+00	0.104965D+00	34.27	0.034744
109.0	-0.785611D+00	0.750833D+00	-136.30	1.180935	109.0	0.148039D+00	0.130169D+00	37.76	0.045181
110.0	-0.667322D+00	0.808528D+00	-129.53	1.099036	110.0	0.177613D+00	0.153615D+00	40.86	0.055144
111.0	-0.532303D+00	0.849792D+00	-122.06	1.005494	111.0	0.182363D+00	0.174243D+00	43.70	0.063617
112.0	-0.382964D+00	0.873918D+00	-113.66	0.925972	112.0	0.182039D+00	0.190995D+00	46.38	0.069617
113.0	-0.222171D+00	0.880545D+00	-104.16	0.824720	113.0	0.176536D+00	0.202858D+00	48.97	0.072316
114.0	-0.532055D-01	0.869672D+00	-93.50	0.759160	114.0	0.165907D+00	0.208899D+00	51.54	0.071164
115.0	0.120302D+00	0.841652D+00	-81.87	0.722850	115.0	0.150365D+00	0.203306D+00	54.18	0.066001
116.0	0.294452D+00	0.797189D+00	-69.73	0.722206	116.0	0.130276D+00	0.200430D+00	56.98	0.057144
117.0	0.465115D+00	0.737319D+00	-57.76	0.755972	117.0	0.106157D+00	0.184817D+00	60.13	0.045427
118.0	0.628127D+00	0.663391D+00	-46.56	0.844630	118.0	0.786588D-01	0.161245D+00	64.00	0.032187
119.0	0.779296D+00	0.577030D+00	-36.52	0.940266	119.0	0.485493D-01	0.129746D+00	69.48	0.019191
120.0	0.914567D+00	0.480109D+00	-27.70	1.066936	120.0	0.166920D-01	0.905297D-01	79.56	0.008492
121.0	0.103012D+01	0.374702D+00	-19.99	1.201550	121.0	-0.159800D-01	0.444982D-01	109.75	0.002235
122.0	0.112249D+01	0.264330D+00	-13.19	1.329186	122.0	-0.184927D-01	-0.775347D-02	-170.92	0.002412
123.0	0.118869D+01	0.147474D+00	-7.07	1.434732	123.0	-0.198613D-01	-0.949387D-01	-140.88	0.010595
124.0	0.122628D+01	0.303944D-01	-1.42	1.504676	124.0	-0.109122D+00	-0.125598D+00	-130.98	0.027682
125.0	0.123348D+01	-0.857873D-01	-3.99	1.528838	125.0	-0.135363D+00	-0.188019D+00	-125.75	0.053674
126.0	0.120928D+01	-0.198708D+00	-9.33	1.501841	126.0	-0.157755D+00	-0.250276D+00	-122.22	0.087525
127.0	0.115344D+01	-0.306097D+00	-14.86	1.424109	127.0	-0.175580D+00	-0.310274D+00	-119.50	0.127098
128.0	0.106656D+01	-0.405827D+00	-20.83	1.302249	128.0	-0.188254D+00	-0.365800D+00	-117.23	0.169249
129.0	0.950125D+00	-0.495951D+00	-27.56	1.148706	129.0	-0.195352D+00	-0.414585D+00	-115.23	0.210043
130.0	0.806448D+00	-0.574747D+00	-35.48	0.960692	130.0	-0.196662D+00	-0.454374D+00	-113.40	0.245115
131.0	0.638671D+00	-0.640745D+00	-45.09	0.818455	131.0	-0.191988D+00	-0.482998D+00	-111.68	0.270147
132.0	0.450700D+00	-0.692761D+00	-56.95	0.638088	132.0	-0.181573D+00	-0.498452D+00	-110.02	0.281423
133.0	0.247123D+00	-0.729910D+00	-71.30	0.533838	133.0	-0.165672D+00	-0.494670D+00	-108.37	0.276417
134.0	0.331077D-01	-0.751622D+00	-87.48	0.566031	134.0	-0.144782D+00	-0.503092D+00	-106.68	0.254340
135.0	-0.185741D+00	-0.757650D+00	-103.77	0.608533	135.0	-0.119534D+00	-0.449762D+00	-104.88	0.216574

CIRCULAR PP POLARIZATION KA= 10.000					CIRCULAR OP POLARIZATION KA= 10.000				
THETA	REAL	IMAG	PHASE	NRCS	THETA	REAL	IMAG	PHASE	NRCS
135.0	-0.185741D+00	-0.757650D+00	-103.77	0.608533	135.0	-0.119534E+00	-0.449762D+00	-104.88	0.216574
136.0	-0.403496D+00	-0.748064D+00	-118.34	0.722409	136.0	-0.907211D-01	-0.398367D+00	-102.83	0.166926
137.0	-0.614093D+00	-0.723248D+00	-130.33	0.900198	137.0	-0.592529D-01	-0.328808D+00	-100.22	0.111626
138.0	-0.811443D+00	-0.683681D+00	-139.88	1.126213	138.0	-0.261278D-01	-0.241549D+00	-96.17	0.059028
139.0	-0.969854D+00	-0.630915D+00	-147.49	1.377864	139.0	-0.759793D-02	-0.137648D+00	-86.84	0.019005
140.0	-0.114371D+01	-0.565554D+00	-153.69	1.627920	140.0	0.408458D-01	-0.187804D-01	-24.69	0.002021
141.0	-0.126813D+01	-0.489218D+00	-158.90	1.847491	141.0	0.725511D-01	0.112753D+00	57.24	0.017977
142.0	-0.135890D+01	-0.403508D+00	-163.46	2.00428	142.0	0.101699D+00	0.254040D+00	68.18	0.074879
143.0	-0.141263D+01	-0.310173D+00	-167.62	2.091738	143.0	0.127358D+00	0.401584D+00	72.40	0.177490
144.0	-0.142691D+01	-0.211062D+00	-171.59	2.080624	144.0	0.148714D+00	0.551347D+00	74.90	0.326100
145.0	-0.140037D+01	-0.108089D+00	-175.59	1.972733	145.0	0.165097D+00	0.698816D+00	76.71	0.515601
146.0	-0.133278D+01	-0.318998D-02	-179.86	1.776315	146.0	0.176055D+00	0.839078D+00	78.15	0.735030
147.0	-0.122504D+01	0.101717D+00	-175.25	1.511069	147.0	0.181122D+00	0.966919D+00	79.39	0.967737
148.0	-0.107921D+01	0.204770D+00	-169.26	1.205624	148.0	0.180329D+00	0.107693D+01	80.49	1.192286
149.0	-0.898455D+00	0.304201D+00	161.29	0.899760	149.0	0.173707D+00	0.116361D+01	81.51	1.384160
150.0	-0.686976D+00	0.398366D+00	149.89	0.630631	150.0	0.161538D+00	0.122153D+01	82.47	1.518235
151.0	-0.449894D+00	0.485775D+00	132.80	0.438382	151.0	0.144234D+00	0.124844D+01	83.39	1.571940
152.0	-0.193119D+00	0.565115D+00	108.87	0.356650	152.0	0.122619D+00	0.123404D+01	84.31	1.528910
153.0	-0.768274D-01	0.635274D+00	83.10	0.404876	153.0	0.973085D-01	0.117192D+01	85.25	1.382872
154.0	-0.352933D+00	0.695350D+00	63.09	0.608115	154.0	0.692824D-01	0.106613D+01	86.28	1.141426
155.0	0.626207D+00	0.744665D+00	49.85	0.949170	155.0	0.395496D-01	0.909823D+00	87.51	0.829342
156.0	0.895296D+00	0.782769D+00	41.16	1.414283	156.0	0.917500D-02	0.700649D+00	89.25	0.490993
157.0	0.114731D+01	0.609441D+00	35.20	1.971505	157.0	-0.207598D-01	0.437162D+00	92.72	0.191542
158.0	0.137771D+01	0.824683D+00	30.90	2.578199	158.0	-0.491941D-01	0.116918D+00	112.47	0.016562
159.0	0.158064D+01	0.828712D+00	27.67	3.185202	159.0	-0.751268D-01	-0.253467D+00	-106.51	0.069890
160.0	0.175105D+01	0.821950D+00	25.15	3.747168	160.0	-0.976515D-01	-0.678281D+00	-98.19	0.449601
161.0	0.188487D+01	0.805004D+00	23.13	4.200749	161.0	-0.115990D+00	-0.115270D+01	-95.75	1.342168
162.0	0.197917D+01	0.778652D+00	21.48	4.523406	162.0	-0.129518D+00	-0.167279D+01	-94.43	2.815015
163.0	0.203225D+01	0.743621D+00	20.10	4.683306	163.0	-0.137780D+00	-0.223358D+01	-93.53	5.007852
164.0	0.204368D+01	0.701561D+00	18.95	4.668631	164.0	-0.140555D+00	-0.282305D+01	-92.84	8.023304
165.0	0.201435D+01	0.653027D+00	17.96	4.484039	165.0	-0.137764D+00	-0.345232D+01	-92.29	11.937465
166.0	0.194639D+01	0.599453D+00	17.12	4.147773	166.0	-0.129570D+00	-0.409565D+01	-91.81	16.791100
167.0	0.184317D+01	0.542122D+00	16.39	3.691156	167.0	-0.116326D+00	-0.475065D+01	-91.40	22.582191
168.0	0.170913D+01	0.482351D+00	15.76	3.153794	168.0	-0.985695D-01	-0.540840D+01	-91.04	29.260537
169.0	0.154970D+01	0.421460D+00	15.21	2.579187	169.0	-0.770022D-01	-0.625962D+01	-90.73	36.724961
170.0	0.137108D+01	0.360752D+00	14.74	2.009901	170.0	-0.524644D-01	-0.669444D+01	-90.45	44.823575
171.0	0.117993D+01	0.301491D+00	14.33	1.483128	171.0	-0.259035D+00	-0.730456D+01	-90.20	53.357302
172.0	0.903454D+00	0.244484D+00	13.96	1.027150	172.0	0.166171D-02	-0.787951D+01	-89.99	62.086666
173.0	0.788834D+00	0.192057D+00	13.68	0.659745	173.0	0.291761D-01	-0.841075D+01	-89.80	70.741585
174.0	0.603147D+00	0.144048D+00	13.43	0.384526	174.0	0.555928D-01	-0.888992D+01	-89.64	79.033688
175.0	0.433105D+00	0.101781D+00	13.22	0.197940	175.0	0.759071D-01	-0.930935D+01	-89.51	86.670443
176.0	0.284824D+00	0.660630D-01	13.06	0.085489	176.0	0.101196D+00	-0.966230D+01	-89.40	93.370240
177.0	0.163616D+00	0.375670D-01	12.93	0.028181	177.0	0.118653D+00	-0.994301D+01	-89.32	96.877467
178.0	0.738132D-01	0.168262D-01	12.84	0.005732	178.0	0.131617D+00	-0.101469D+02	-89.26	102.976566
179.0	0.186190D-01	0.422606D-02	12.74	0.000365	179.0	0.139596D+00	-0.102706D+02	-89.22	105.504129
180.0	0.322386D-09	-0.144101D-09	-24.08	0.000000	180.0	0.132290D+00	-0.103120D+02	-89.21	106.358200

CIRCULAR PP POLARIZATION KA= 15.000

CIRCULAR OP POLARIZATION KA= 15.000

THETA	REAL	IMAG	PHASE	RMCS	THETA	REAL	IMAG	PHASE	RMCS
0.0	-0.176480D+00	0.945586D+00	100.57	0.925264	0.0	0.673390D-11	0.916982D-12	7.75	0.000000
1.0	-0.175373D+00	0.946558D+00	100.50	0.926728	1.0	0.307956D-04	-0.379109D-03	-85.36	0.000000
2.0	-0.172179D+00	0.949422D+00	100.28	0.931047	2.0	0.127135D-03	-0.148690D-02	-85.11	0.000002
3.0	-0.166871D+00	0.954024D+00	99.92	0.936008	3.0	0.300139D-03	-0.323677D-02	-84.70	0.000011
4.0	-0.159466D+00	0.960120D+00	99.43	0.941260	4.0	0.565995D-03	-0.549109D-02	-84.11	0.000030
5.0	-0.149986D+00	0.967383D+00	98.81	0.958325	5.0	0.942717D-03	-0.807085D-02	-83.34	0.000066
6.0	-0.138449D+00	0.975422D+00	98.08	0.970617	6.0	0.144614D-02	-0.107683D-01	-82.35	0.000118
7.0	-0.124864D+00	0.983805D+00	97.23	0.983464	7.0	0.208565D-02	-0.133615D-01	-81.13	0.000183
8.0	-0.109228D+00	0.992075D+00	96.28	0.994145	8.0	0.286089D-02	-0.156304D-01	-79.63	0.000252
9.0	-0.915272D-01	0.999776D+00	95.23	1.007928	9.0	0.375455D-02	-0.173725D-01	-77.80	0.000316
10.0	-0.717122D-01	0.100674D+01	94.08	1.018124	10.0	0.473822D-02	-0.184179D-01	-75.57	0.000362
11.0	-0.497353D-01	0.101176D+01	92.81	1.026131	11.0	0.576404D-02	-0.186421D-01	-72.82	0.000381
12.0	-0.255216D-01	0.101530D+01	91.44	1.031490	12.0	0.676997D-02	-0.179760D-01	-69.36	0.000369
13.0	-0.101207D-02	0.101682D+01	89.94	1.033924	13.0	0.768233D-02	-0.164118D-01	-64.92	0.000328
14.0	0.259522D-01	0.101611D+01	88.31	1.033369	14.0	0.842073D-02	-0.140057D-01	-58.98	0.000267
15.0	0.613787D-01	0.101303D+01	86.53	1.029989	15.0	0.890446D-02	-0.108748D-01	-50.69	0.000198
16.0	0.953534D-01	0.100751D+01	84.59	1.024174	16.0	0.905984D-02	-0.719121D-02	-38.44	0.000134
17.0	0.131908D+00	0.999556D+00	82.48	1.016512	17.0	0.882777D-02	-0.317097D-02	-19.76	0.000088
18.0	0.171033D+00	0.989191D+00	80.19	1.007750	18.0	0.817097D-02	0.939619D-03	6.56	0.000068
19.0	0.212663D+00	0.976476D+00	77.71	0.998731	19.0	0.703008D-02	0.488037D-02	34.58	0.000074
20.0	0.256673D+00	0.961479D+00	75.05	0.990323	20.0	0.557797D-02	0.839495D-02	56.40	0.000102
21.0	0.302867D+00	0.944253D+00	72.22	0.983342	21.0	0.372165D-02	0.112488D-01	71.69	0.000140
22.0	0.350975D+00	0.924820D+00	69.22	0.974475	22.0	0.160154D-02	0.132458D-01	83.11	0.000178
23.0	0.400656D+00	0.903150D+00	66.08	0.976206	23.0	-0.662309D-03	0.142432D-01	92.66	0.000203
24.0	0.451498D+00	0.879154D+00	62.82	0.976763	24.0	-0.292679D-02	0.141628D-01	101.68	0.000209
25.0	0.503028D+00	0.852671D+00	59.46	0.980084	25.0	-0.503490D-02	0.129979D-01	111.17	0.000194
26.0	0.554720D+00	0.823466D+00	56.03	0.985810	26.0	-0.682692D-02	0.108156D-01	122.26	0.000164
27.0	0.606011D+00	0.791237D+00	52.55	0.993305	27.0	-0.815277D-02	0.775423D-02	136.44	0.000127
28.0	0.656315D+00	0.755623D+00	49.02	1.001715	28.0	-0.888475D-02	0.401504D-02	155.68	0.000095
29.0	0.705032D+00	0.716225D+00	45.45	1.010048	29.0	-0.892947D-02	-0.150018D-03	-179.04	0.000080
30.0	0.751572D+00	0.672621D+00	41.83	1.017280	30.0	-0.823804D-02	-0.445529D-02	-151.59	0.000088
31.0	0.795358D+00	0.624403D+00	38.13	1.022474	31.0	-0.681358D-02	-0.860046D-02	-128.39	0.000120
32.0	0.835842D+00	0.571199D+00	34.35	1.024900	32.0	-0.471512D-02	-0.122918D-01	-110.98	0.000173
33.0	0.872508D+00	0.512707D+00	30.44	1.024138	33.0	-0.205738D-02	-0.152638D-01	-97.68	0.000237
34.0	0.904875D+00	0.448729D+00	26.38	1.020156	34.0	0.933766D-03	-0.172368D-01	-86.71	0.000300
35.0	0.932498D+00	0.379196D+00	22.13	1.013341	35.0	0.423027D-02	-0.172383D-01	-76.94	0.000351
36.0	0.954960D+00	0.304193D+00	17.67	1.004482	36.0	0.741475D-02	-0.180116D-01	-67.62	0.000379
37.0	0.971869D+00	0.223980D+00	12.96	0.994696	37.0	0.102965D-01	-0.166254D-01	-58.23	0.000382
38.0	0.982843D+00	0.139002D+00	8.05	0.985301	38.0	0.126298D-01	-0.141752D-01	-48.30	0.000360
39.0	0.987505D+00	0.498950D-01	2.89	0.977656	39.0	0.141927D-01	-0.108383D-01	-37.37	0.000319
40.0	0.985474D+00	-0.425223D-01	-2.47	0.973968	40.0	0.148054D-01	-0.686319D-02	-24.87	0.000266
41.0	0.976359D+00	-1.137257D+00	-8.00	0.972116	41.0	0.143469D-01	-0.255256D-02	-10.09	0.000212
42.0	0.959755D+00	-0.133164D+00	-13.65	0.974995	42.0	0.127672D-01	-0.175767D-02	7.84	0.000166
43.0	0.935252D+00	-0.328292D+00	-19.38	0.982919	43.0	0.100960D-01	0.572304D-02	29.55	0.000135
44.0	0.902442D+00	-0.423317D+00	-25.13	0.993600	44.0	0.644479D-02	0.901669D-02	54.44	0.000123
45.0	0.860937D+00	-0.547777D+00	-30.48	1.006208	45.0	0.208334D-02	0.113552D-01	79.99	0.000133

CIRCULAR P2 POLARIZATION KA= 15.000

THETA	REAL	IMAG	PHASE	NRCS
45.0	0.860937D+00	-0.514777D+00	-30.88	1.006208
46.0	0.810394D+00	-0.601907D+00	-36.60	1.019031
47.0	0.750544D+00	-0.683281D+00	-42.31	1.030190
48.0	0.681232D+00	-0.757521D+00	-48.04	1.037915
49.0	0.602448D+00	-0.823332D+00	-53.81	1.040820
50.0	0.514378D+00	-0.879526D+00	-59.68	1.038150
51.0	0.417430D+00	-0.925044D+00	-65.71	0.929955
52.0	0.312281D+00	-0.958970D+00	-71.96	1.017143
53.0	0.199893D+00	-0.980541D+00	-78.48	1.001417
54.0	0.815350D-01	-0.989150D+00	-85.29	0.985066
55.0	-0.412114D-01	-0.984351D+00	-92.40	0.970645
56.0	-0.166464D+00	-0.965853D+00	-99.78	0.960583
57.0	-0.290660D+00	-0.933527D+00	-107.37	0.956775
58.0	-0.415621D+00	-0.887298D+00	-115.10	0.960216
59.0	-0.534534D+00	-0.827658D+00	-122.86	0.970765
60.0	-0.646178D+00	-0.754669D+00	-130.57	0.987071
61.0	-0.747775D+00	-0.668979D+00	-138.18	1.006699
62.0	-0.836683D+00	-0.571339D+00	-145.67	1.026467
63.0	-0.910393D+00	-0.462728D+00	-153.06	1.052933
64.0	-0.966638D+00	-0.344375D+00	-160.39	1.082984
65.0	-0.100349D+01	-0.217782D+00	-167.76	1.054417
66.0	-0.101943D+01	-0.847490D-01	-175.25	1.086417
67.0	-0.101344D+01	0.526135D-01	177.03	1.029820
68.0	-0.985030D+00	0.191828D+00	168.98	1.007103
69.0	-0.934318D+00	0.330328D+00	160.53	0.982066
70.0	-0.862007D+00	0.464949D+00	151.66	0.959234
71.0	-0.769413D+00	0.592513D+00	142.40	0.943067
72.0	-0.658430D+00	0.709631D+00	132.86	0.937106
73.0	-0.531499D+00	0.812848D+00	123.18	0.932113
74.0	-0.391548D+00	0.898753D+00	113.54	0.910671
75.0	-0.241918D+00	0.964114D+00	104.09	0.988039
76.0	-0.862816D-01	0.100601D+01	94.90	1.019511
77.0	0.714512D-01	0.102201D+01	86.00	1.089616
78.0	0.227234D+00	0.101028D+01	77.32	1.072309
79.0	0.376987D+00	0.969768D+00	68.76	1.082570
80.0	0.516700D+00	0.900293D+00	60.15	1.077507
81.0	0.642536D+00	0.802672D+00	51.32	1.057135
82.0	0.750930D+00	0.678767D+00	42.11	1.024622
83.0	0.838664D+00	0.531514D+00	32.36	0.985899
84.0	0.903057D+00	0.364890D+00	22.00	0.948658
85.0	0.944848D+00	0.183838D+00	11.04	0.920874
86.0	0.953470D+00	-0.586578D-02	-0.35	0.909139
87.0	0.937020D+00	-0.197792D+00	-11.92	0.917128
88.0	0.892338D+00	-0.385088D+00	-23.34	0.944560
89.0	0.820051D+00	-0.560744D+00	-34.36	0.969617
90.0	0.721609D+00	-0.717882D+00	-44.85	1.036074

CIRCULAR OP POLARIZATION KA= 15.000

THETA	REAL	IMAG	PHASE	NRCS
45.0	0.200334D-02	0.113552D-01	79.99	0.000133
46.0	-0.297024D-02	0.125222D-01	103.34	0.000166
47.0	-0.616515D-02	0.123880D-01	123.39	0.000220
48.0	-0.132385D-01	0.139231D-01	140.47	0.000295
49.0	-0.178394D-01	0.820556D-02	155.30	0.000386
50.0	-0.216351D-01	0.441906D-02	168.46	0.000488
51.0	-0.243371D-01	-0.155704D-03	-179.63	0.000592
52.0	-0.257249D-01	-0.515839D-02	-168.66	0.000688
53.0	-0.256657D-01	-0.101730D-01	-158.38	0.000762
54.0	-0.241230D-01	-0.147572D-01	-148.55	0.000800
55.0	-0.211930D-01	-0.147572D-01	-138.92	0.000790
56.0	-0.170430D-01	-0.209334D-01	-129.15	0.000729
57.0	-0.119622D-01	-0.218094D-01	-118.74	0.000619
58.0	-0.531264D-02	-0.208851D-01	-106.82	0.000476
59.0	-0.510910D-03	-0.180666D-01	-91.62	0.000327
60.0	0.500341D-02	-0.133996D-01	-69.52	0.000205
61.0	0.380174D-02	-0.707377D-02	-35.82	0.000146
62.0	0.135017D-01	0.583726D-03	2.48	0.000183
63.0	0.130050D-01	0.912456D-02	30.01	0.000333
64.0	0.165033D-01	0.180062D-01	47.49	0.000597
65.0	0.155453D-01	0.266268D-01	59.72	0.000951
66.0	0.130030D-01	0.343668D-01	69.28	0.001350
67.0	0.909617D-02	0.406338D-01	77.38	0.001734
68.0	0.417691D-02	0.449066D-01	84.69	0.002034
69.0	0.129190D-02	0.467780D-01	91.58	0.002190
70.0	-0.676913D-02	0.459890D-01	98.37	0.002161
71.0	-0.116763D-01	0.424549D-01	105.38	0.001939
72.0	-0.154400D-01	0.362793D-01	113.06	0.001555
73.0	-0.175613D-01	0.277539D-01	122.32	0.001079
74.0	-0.176233D-01	0.173454D-01	135.46	0.000611
75.0	-0.153735D-01	0.566746D-02	159.76	0.000268
76.0	-0.107372D-01	-0.655830D-02	-148.58	0.000158
77.0	-0.384290D-02	-0.185519D-01	101.70	0.000359
78.0	0.497177D-02	-0.295307D-01	-80.44	0.000897
79.0	0.151697D-01	-0.385467D-01	-68.63	0.001733
80.0	0.260413D-01	-0.456437D-01	-60.29	0.002761
81.0	0.367468D-01	-0.497049D-01	-53.52	0.003821
82.0	0.463724D-01	-0.506930D-01	-47.55	0.004720
83.0	0.539961D-01	-0.485744D-01	-41.97	0.005275
84.0	0.587601D-01	-0.435467D-01	-36.54	0.005349
85.0	0.599431D-01	-0.360290D-01	-31.01	0.004891
86.0	0.570274D-01	-0.266338D-01	-25.03	0.003961
87.0	0.497563D-01	-0.161217D-01	-17.95	0.002736
88.0	0.381736D-01	-0.534366D-02	-7.97	0.001486
89.0	0.226550D-01	0.482735D-02	12.03	0.000537
90.0	0.388697D-02	0.135689D-01	74.01	0.000199

CIRCULAR PP POLARIZATION KA= 15.000					CIRCULAR OP POLARIZATION KA= 15.000				
THETA	REAL	IMAG	PHASE	WCS	THETA	REAL	IMAG	PHASE	WCS
90.0	0.721609D+00	-0.717882D+00	-44.85	1.036074	50.0	0.388697D-02	0.135689D-01	74.01	0.000199
91.0	0.599299D+00	-0.850070D+00	-54.82	1.081778	91.0	-0.171382D-01	0.201801D-01	130.34	0.000701
92.0	0.456248D+00	-0.951622D+00	-64.39	1.113743	92.0	-0.391821D-01	0.241460D-01	148.36	0.002118
93.0	0.296373D+00	-0.101789D+01	-73.77	1.123941	93.0	-0.608280D-01	0.251884D-01	157.51	0.004335
94.0	0.123633D+00	-0.104553D+01	-83.22	1.108606	94.0	-0.805754D-01	0.232996D-01	163.87	0.007035
95.0	-0.584447D+01	-0.103270D+01	-93.02	1.069443	95.0	-0.969315D-01	0.187534D-01	169.05	0.009447
96.0	-0.234168D+00	-0.979223D+00	-103.45	1.013712	96.0	-0.108529D+00	0.120932D-01	173.64	0.01125
97.0	-0.408544D+00	-0.886639D+00	-114.74	0.953037	97.0	-0.114226D+00	0.409563D-02	177.95	0.013064
98.0	-0.571118D+00	-0.758234D+00	-126.99	0.901095	98.0	-0.113205D+00	-0.428933D-02	177.83	0.012834
99.0	-0.715473D+00	-0.598938D+00	-140.07	0.870623	99.0	-0.105052D+00	-0.120163D-01	173.47	0.011180
100.0	-0.835477D+00	-0.415135D+00	-153.58	0.870359	100.0	-0.898103D-01	-0.180371D-01	168.64	0.008391
101.0	-0.925558D+00	-0.214458D+00	-165.95	0.902651	101.0	-0.680062D-01	-0.213993D-01	162.53	0.005083
102.0	-0.980985D+00	-0.542705D-02	-175.68	0.962361	102.0	-0.406442D-01	-0.213445D-01	152.29	0.002108
103.0	-0.998138D+00	0.202906D+00	168.51	1.037449	103.0	-0.916379D-02	-0.173968D-01	117.78	0.000387
104.0	-0.974767D+00	0.401370D+00	157.62	1.111268	104.0	-0.266343D-01	-0.943274D-02	-20.95	0.000596
105.0	-0.910210D+00	0.581112D+00	147.44	1.166173	105.0	0.586926D-01	0.227288D-02	2.22	0.003450
106.0	-0.805557D+00	0.734019D+00	137.66	1.187706	106.0	0.908242D-01	0.170337D-01	10.62	0.008539
107.0	-0.663747D+00	0.853125D+00	127.88	1.168382	107.0	0.113857D+00	0.337718D-01	15.86	0.015267
108.0	-0.489576D+00	0.932967D+00	117.69	1.101113	108.0	0.140781D+00	0.510754D-01	19.94	0.022428
109.0	-0.289621D+00	0.969871D+00	106.63	1.024531	109.0	0.154899D+00	0.672907D-01	23.48	0.028522
110.0	-0.720491D-01	0.962160D+00	94.28	0.930443	110.0	0.159953D+00	0.806427D-01	26.76	0.032088
111.0	0.153662D+00	0.910259D+00	80.42	0.852183	111.0	0.155230D+00	0.893796D-01	29.93	0.032085
112.0	0.377109D+00	0.816705D+00	65.22	0.809219	112.0	0.140640D+00	0.919294D-01	33.17	0.028231
113.0	0.587430D+00	0.686042D+00	49.43	0.85728	113.0	0.116741D+00	0.870569D-01	36.71	0.021207
114.0	0.773834D+00	0.524617D+00	34.14	0.874041	114.0	0.847366D-01	0.740089D-01	41.13	0.012658
115.0	0.926178D+00	0.340278D+00	20.17	0.973595	115.0	0.464111D-01	0.526345D-01	48.60	0.004924
116.0	0.103555D+01	0.141999D+00	7.81	1.032533	116.0	0.403534D-02	0.234682D-01	80.24	0.000567
117.0	0.109484D+01	-0.603632D-01	-3.17	1.202342	117.0	-0.397724D-01	-0.122347D-01	-162.50	0.001732
118.0	0.109922D+01	-0.257549D+00	-13.19	1.274615	118.0	-0.822121D-01	-0.525174D-01	-147.43	0.009517
119.0	0.104658D+01	-0.439391D+00	-22.77	1.288392	119.0	-0.120487D+00	-0.947966D-01	-141.80	0.023504
120.0	0.937793D+00	-0.597292D+00	-32.49	1.236214	120.0	-0.151996D+00	-0.136013D+00	-138.18	0.041602
121.0	0.776853D+00	-0.723676D+00	-42.97	1.127207	121.0	-0.174513D+00	-0.172791D+00	-135.28	0.060312
122.0	0.570817D+00	-0.812566D+00	-54.91	0.986095	122.0	-0.186355D+00	-0.201702D+00	-132.74	0.075412
123.0	0.329582D+00	-0.859890D+00	-69.03	0.848034	123.0	-0.186511D+00	-0.219506D+00	-130.35	0.082969
124.0	0.054564D-01	-0.863684D+00	-85.67	0.750235	124.0	-0.174727D+00	-0.223439D+00	-128.03	0.080455
125.0	-0.207421D+00	-0.824189D+00	-104.13	0.722311	125.0	-0.151455D+00	-0.211469D+00	-125.63	0.067685
126.0	-0.473828D+00	-0.743828D+00	-122.50	0.777789	126.0	-0.118285D+00	-0.182541D+00	-122.94	0.047313
127.0	-0.718289D+00	-0.627075D+00	-138.88	0.909163	127.0	-0.769690D-01	-0.136762D+00	-119.37	0.024628
128.0	-0.926027D+00	-0.480219D+00	-152.59	1.088137	128.0	-0.302027D-01	-0.755216D-01	-111.80	0.006616
129.0	-0.108385D+01	-0.311027D+00	-163.99	1.271464	129.0	0.189973D-01	-0.152822D-02	-4.60	0.000363
130.0	-0.118104D+01	-0.128338D+00	-173.80	1.411323	130.0	0.674012D-01	0.812506D-01	50.32	0.011145
131.0	-0.121013D+01	0.583974D-01	177.24	1.467830	131.0	0.111786D+00	0.167747D+00	56.32	0.040635
132.0	-0.116751D+01	0.239610D+00	168.40	1.420503	132.0	0.149158D+00	0.252049D+00	59.38	0.085777
133.0	-0.105382D+01	0.406104D+00	158.93	1.275448	133.0	0.176963D+00	0.327747D+00	61.63	0.138734
134.0	-0.874058D+00	0.545524D+00	147.84	1.065954	134.0	0.193274D+00	0.388346D+00	63.54	0.188167
135.0	-0.637521D+00	0.662780D+00	133.89	0.845710	135.0	0.196927D+00	0.427735D+00	65.28	0.221737

CIRCULAR PP POLARIZATION					CIRCULAR OF POLARIZATION					KA= 15.000				
THETA	REAL	IMAG	PHASE	MRCS	THETA	REAL	IMAG	PHASE	MRCS	THETA	REAL	IMAG	PHASE	MRCS
135.0	-0.637521D+00	0.662780D+00	133.89	0.845710	135.0	0.196927D+00	0.427735D+00	65.28	0.221737	135.0	0.196927D+00	0.427735D+00	65.28	0.221737
136.0	-0.357334D+00	0.740399D+00	115.76	0.675879	136.0	0.187615D+00	0.440669D+00	66.94	0.229389	137.0	0.165918D+00	0.423241D+00	68.59	0.206662
137.0	-0.498023D+01	0.778787D+00	93.66	0.608989	137.0	0.165918D+00	0.423241D+00	68.59	0.206662	138.0	0.133269D+00	0.373305D+00	70.35	0.157118
138.0	0.266514D+00	0.776391D+00	71.05	0.673913	138.0	0.133269D+00	0.373305D+00	70.35	0.157118	139.0	0.186181D+00	0.290822D+00	72.47	0.093016
139.0	0.571894D+00	0.733760D+00	52.07	0.865467	139.0	0.186181D+00	0.290822D+00	72.47	0.093016	140.0	0.445020D+01	0.178081D+00	75.97	0.033693
140.0	0.846686D+00	0.653486D+00	37.66	1.143921	140.0	0.445020D+01	0.178081D+00	75.97	0.033693	141.0	-0.558748D+02	0.397932D+01	97.99	0.001615
141.0	0.107258D+01	0.540046D+00	26.73	1.442070	141.0	-0.558748D+02	0.397932D+01	97.99	0.001615	142.0	-0.549918D+01	-0.116980D+00	-115.18	0.016708
142.0	0.123383D+01	0.399555D+00	17.94	1.681972	142.0	-0.549918D+01	-0.116980D+00	-115.18	0.016708	143.0	-0.100345D+00	-0.283068D+00	-109.52	0.030197
143.0	0.131839D+01	0.239424D+00	10.29	1.795479	143.0	-0.100345D+00	-0.283068D+00	-109.52	0.030197	144.0	-0.138569D+00	-0.447604D+00	-107.20	0.219551
144.0	0.131883D+01	0.679739D+01	2.95	1.743937	144.0	-0.138569D+00	-0.447604D+00	-107.20	0.219551	145.0	-0.167093D+00	-0.598588D+00	-105.60	0.386228
145.0	0.123296D+01	-0.105999D+00	-4.91	1.531426	145.0	-0.167093D+00	-0.598588D+00	-105.60	0.386228	146.0	-0.184035D+00	-0.723591D+00	-104.27	0.557453
146.0	0.106416D+01	-0.273675D+00	-14.42	1.207336	146.0	-0.184035D+00	-0.723591D+00	-104.27	0.557453	147.0	-0.188337D+00	-0.810559D+00	-103.08	0.692477
147.0	0.821346D+00	-0.426645D+00	-27.45	0.856636	147.0	-0.188337D+00	-0.810559D+00	-103.08	0.692477	148.0	-0.179838D+00	-0.848672D+00	-101.96	0.752586
148.0	0.518548D+00	-0.557330D+00	-47.06	0.579509	148.0	-0.179838D+00	-0.848672D+00	-101.96	0.752586	149.0	-0.159282D+00	-0.829213D+00	-100.87	0.712965
149.0	0.174147D+00	-0.659333D+00	-75.20	0.465047	149.0	-0.159282D+00	-0.829213D+00	-100.87	0.712965	150.0	-0.128260D+00	-0.746393D+00	-99.75	0.573553
150.0	-0.190212D+00	-0.727734D+00	-104.65	0.565777	150.0	-0.128260D+00	-0.746393D+00	-99.75	0.573553	151.0	-0.890890D+01	-0.590069D+00	-98.47	0.365623
151.0	-0.550950D+00	-0.759305D+00	-125.96	0.880090	151.0	-0.890890D+01	-0.590069D+00	-98.47	0.365623	152.0	-0.446404D+01	-0.386313D+00	-96.59	0.151231
152.0	-0.864068D+00	-0.752625D+00	-139.59	1.348022	152.0	-0.446404D+01	-0.386313D+00	-96.59	0.151231	153.0	0.187701D+02	-0.117747D+00	-89.09	0.013874
153.0	-0.116672D+01	-0.708117D+00	-148.75	1.862656	153.0	0.187701D+02	-0.117747D+00	-89.09	0.013874	154.0	0.471533D+01	0.196198D+00	76.49	0.040717
154.0	-0.137873D+01	-0.627978D+00	-155.51	2.295263	154.0	0.471533D+01	0.196198D+00	76.49	0.040717	155.0	0.880220D+01	0.539695D+00	80.74	0.299019
155.0	-0.150405D+01	-0.516035D+00	-161.06	2.528445	155.0	0.880220D+01	0.539695D+00	80.74	0.299019	156.0	0.121692D+00	0.892667D+00	82.24	0.811676
156.0	-0.153181D+01	-0.377520D+00	-166.16	2.488971	156.0	0.121692D+00	0.892667D+00	82.24	0.811676	157.0	0.145949D+00	0.123165D+01	83.24	1.538268
157.0	-0.145725D+01	-0.218785D+00	-171.46	2.171446	157.0	0.145949D+00	0.123165D+01	83.24	1.538268	158.0	0.159313D+00	0.153066D+01	84.06	2.368289
158.0	-0.128206D+01	-0.469656D+01	-177.90	1.645872	158.0	0.159313D+00	0.153066D+01	84.06	2.368289	159.0	0.161137D+00	0.176239D+01	84.78	3.131993
159.0	-0.101439D+01	-0.130372D+00	-172.68	1.045989	159.0	0.161137D+00	0.176239D+01	84.78	3.131993	160.0	0.151643D+00	0.189958D+01	85.44	3.631385
160.0	-0.668444D+00	0.305607D+00	155.43	0.540214	160.0	0.151643D+00	0.189958D+01	85.44	3.631385	161.0	0.131889D+00	0.191616D+01	86.06	3.589807
161.0	-0.263536D+00	0.471422D+00	119.21	0.291690	161.0	0.131889D+00	0.191616D+01	86.06	3.589807	162.0	0.103674D+00	0.178943D+01	86.68	3.214192
162.0	0.177106D+00	0.621139D+00	74.09	0.471780	162.0	0.103674D+00	0.178943D+01	86.68	3.214192	163.0	0.093839D+01	0.150130D+01	87.35	2.258726
163.0	0.627877D+00	0.749016D+00	50.33	0.955254	163.0	0.093839D+01	0.150130D+01	87.35	2.258726	164.0	0.317997D+01	0.103778D+01	88.24	1.078001
164.0	0.106251D+01	0.850486D+00	38.68	1.852250	164.0	0.317997D+01	0.103778D+01	88.24	1.078001	165.0	-0.613022D+02	0.392862D+00	90.89	0.154378
165.0	0.145584D+01	0.922338D+00	32.36	2.970173	165.0	-0.613022D+02	0.392862D+00	90.89	0.154378	166.0	-0.415228D+01	-0.432396D+00	-95.49	0.188690
166.0	0.178553D+01	0.962829D+00	28.34	4.115153	166.0	-0.415228D+01	-0.432396D+00	-95.49	0.188690	167.0	-0.717662D+01	-0.142903D+01	-92.88	2.047267
167.0	0.203360D+01	0.971720D+00	25.54	5.079750	167.0	-0.717662D+01	-0.142903D+01	-92.88	2.047267	168.0	-0.948225D+01	-0.236008D+01	-92.10	6.665722
168.0	0.218765D+01	0.950248D+00	23.48	5.688773	168.0	-0.948225D+01	-0.236008D+01	-92.10	6.665722	169.0	-0.109179D+00	-0.386085D+01	-91.62	14.918120
169.0	0.224174D+01	0.901026D+00	21.90	5.837242	169.0	-0.109179D+00	-0.386085D+01	-91.62	14.918120	170.0	-0.114159D+00	-0.523974D+01	-91.25	27.467914
170.0	0.219677D+01	0.827888D+00	20.65	5.511201	170.0	-0.114159D+00	-0.523974D+01	-91.25	27.467914	171.0	-0.109858D+00	-0.667913D+01	-90.94	44.622835
171.0	0.206031D+01	0.735678D+00	19.65	4.786516	171.0	-0.109858D+00	-0.667913D+01	-90.94	44.622835	172.0	-0.971429D+01	-0.813699D+01	-90.68	66.218337
172.0	0.184653D+01	0.630002D+00	18.84	3.806578	172.0	-0.971429D+01	-0.813699D+01	-90.68	66.218337	173.0	-0.775623D+01	-0.956799D+01	-90.46	91.552452
173.0	0.157420D+01	0.516951D+00	18.18	2.745343	173.0	-0.775623D+01	-0.956799D+01	-90.46	91.552452	174.0	-0.532074D+01	-0.109264D+02	-90.28	119.388869
174.0	0.126631D+01	0.402807D+00	17.65	1.765784	174.0	-0.532074D+01	-0.109264D+02	-90.28	119.388869	175.0	-0.265255D+01	-0.121670D+02	-90.12	148.035501
175.0	0.947898D+00	0.293748D+00	17.22	0.984798	175.0	-0.265255D+01	-0.121670D+02	-90.12	148.035501	176.0	-0.107402D+03	-0.132474D+02	-90.00	175.494117
176.0	0.644371D+00	0.195565D+00	16.88	0.453459	176.0	-0.107402D+03	-0.132474D+02	-90.00	175.494117	177.0	0.235360D+01	-0.141303D+02	-89.90	199.664831
177.0	0.379626D+00	0.113396D+00	16.63	0.156705	177.0	0.235360D+01	-0.141303D+02	-89.90	199.664831	178.0	0.421883D+01	-0.147844D+02	-89.84	218.579438
178.0	0.174336D+00	0.514397D+01	16.46	0.033045	178.0	0.421883D+01	-0.147844D+02	-89.84	218.579438	179.0	0.541166D+01	-0.151865D+02	-89.80	230.631571
179.0	0.444426D+01	0.130397D+01	16.35	0.002445	179.0	0.541166D+01	-0.151865D+02	-89.80	230.631571	180.0	0.582188D+01	-0.153221D+02	-89.78	234.770716
180.0	0.195013D+09	0.304424D+10	9.87	0.000000	180.0	0.582188D+01	-0.153221D+02	-89.78	234.770716					

CIRCULAR PP POLARIZATION KA= 20.000

THETA	REAL	IMAG	PHASE	NRCS	THETA	REAL	IMAG	PHASE	NRCS
0.0	0.685583D+00	-0.704509D+00	-45.78	0.966337	0.0	0.85166CD-11	0.774147D-11	42.27	0.000000
1.0	0.684333D+00	-0.706350D+00	-45.91	0.967242	1.0	0.684244D-04	0.397567D-03	80.22	0.000000
2.0	0.680601D+00	-0.711786D+00	-46.28	0.969858	2.0	0.255362D-03	0.153875D-02	80.58	0.000002
3.0	0.674440D+00	-0.720562D+00	-46.89	0.974079	3.0	0.508188D-03	0.327495D-02	81.18	0.000011
4.0	0.665919D+00	-0.732280D+00	-47.72	0.979682	4.0	0.750538D-03	0.537788D-02	82.06	0.000029
5.0	0.655111D+00	-0.746432D+00	-48.73	0.985332	5.0	0.696489D-03	0.756646D-02	83.24	0.000058
6.0	0.642070D+00	-0.762446D+00	-49.50	0.993576	6.0	0.867507D-03	0.954003D-02	84.80	0.000092
7.0	0.626803D+00	-0.779730D+00	-51.21	1.000861	7.0	0.608887D-03	0.110143D-01	86.84	0.000122
8.0	0.609262D+00	-0.797726D+00	-52.63	1.007567	8.0	0.102922D-03	0.117559D-01	89.50	0.000138
9.0	0.589326D+00	-0.815940D+00	-54.16	1.013070	9.0	-0.623561D-03	0.116115D-01	93.07	0.000135
10.0	0.566804D+00	-0.833996D+00	-55.80	1.016816	10.0	-0.149886D-02	0.105280D-01	98.10	0.000113
11.0	0.541744D+00	-0.851610D+00	-57.55	1.018401	11.0	-0.241370D-02	0.956145D-02	105.74	0.000079
12.0	0.512952D+00	-0.868632D+00	-59.44	1.017641	12.0	-0.323554D-02	0.587359D-02	118.85	0.000045
13.0	0.481016D+00	-0.885011D+00	-61.48	1.014621	13.0	-0.382786D-02	0.271560D-02	144.65	0.000022
14.0	0.445343D+00	-0.900767D+00	-63.69	1.009710	14.0	-0.407191D-02	-0.598766D-03	-171.63	0.000017
15.0	0.405685D+00	-0.915949D+00	-66.11	1.003544	15.0	-0.388748D-02	-0.372812D-02	-136.20	0.000029
16.0	0.361895D+00	-0.930590D+00	-68.75	0.996959	16.0	-0.324949D-02	-0.634250D-02	-117.13	0.000051
17.0	0.313867D+00	-0.944658D+00	-71.62	0.990811	17.0	-0.219747D-02	-0.816108D-02	-105.07	0.000071
18.0	0.261683D+00	-0.958005D+00	-74.72	0.986252	18.0	-0.836101D-03	-0.899106D-02	-95.31	0.000082
19.0	0.205498D+00	-0.970341D+00	-78.04	0.983790	19.0	0.674084D-03	-0.874254D-02	-85.59	0.000077
20.0	0.145568D+00	-0.981204D+00	-81.56	0.983954	20.0	0.213504D-02	-0.745118D-02	-74.01	0.000060
21.0	0.822610D-01	-0.989966D+00	-85.25	0.986799	21.0	0.333654D-02	-0.527187D-02	-57.67	0.000039
22.0	0.159897D-01	-0.995833D+00	-89.08	0.991938	22.0	0.408536D-02	-0.246397D-02	-31.10	0.000023
23.0	-0.527918D-01	-0.997892D+00	-93.03	0.998575	23.0	0.423421D-02	0.637363D-03	8.56	0.000018
24.0	-0.126617D+00	-0.995152D+00	-97.08	1.005608	24.0	0.370839D-02	0.365928D-02	44.63	0.000027
25.0	-0.196023D+00	-0.986599D+00	-101.24	1.011802	25.0	0.251217D-02	0.623633D-02	68.06	0.000045
26.0	-0.269555D+00	-0.971263D+00	-105.51	1.016012	26.0	0.754135D-03	0.805478D-02	84.65	0.000065
27.0	-0.343762D+00	-0.948279D+00	-109.93	1.017406	27.0	-0.138008D-02	0.888924D-02	98.82	0.000081
28.0	-0.418175D+00	-0.916940D+00	-114.52	1.015649	28.0	-0.363743D-02	0.863920D-02	112.83	0.000088
29.0	-0.492277D+00	-0.876738D+00	-119.31	1.011007	29.0	-0.572953D-02	0.733733D-02	127.98	0.000067
30.0	-0.565463D+00	-0.827398D+00	-124.35	1.004336	30.0	-0.736960D-02	0.515428D-02	145.03	0.000081
31.0	-0.637007D+00	-0.766877D+00	-129.64	0.996950	31.0	-0.831161D-02	0.237627D-02	164.04	0.000075
32.0	-0.706018D+00	-0.701365D+00	-135.19	0.990575	32.0	-0.838617D-02	-0.623356D-03	-175.74	0.000071
33.0	-0.771425D+00	-0.625257D+00	-140.97	0.986083	33.0	-0.752819D-02	-0.343402D-02	-155.48	0.000068
34.0	-0.831961D+00	-0.541122D+00	-146.96	0.984972	34.0	-0.579185D-02	-0.565314D-02	-135.69	0.000066
35.0	-0.886181D+00	-0.449669D+00	-153.10	0.987519	35.0	-0.334998D-02	-0.694416D-02	-115.75	0.000059
36.0	-0.932493D+00	-0.351710D+00	-159.33	0.993283	36.0	-0.477201D-03	-0.707950D-02	-93.86	0.000050
37.0	-0.969218D+00	-0.248134D+00	-165.64	1.000954	37.0	0.248199D-02	-0.597897D-02	-67.44	0.000042
38.0	-0.994661D+00	-0.139898D+00	-171.99	1.008922	38.0	0.515657D-02	-0.370870D-02	-35.71	0.000040
39.0	-0.100720D+01	-0.280270D-01	-178.41	1.015243	39.0	0.719847D-02	-0.506936D-03	-4.03	0.000052
40.0	-0.100539D+01	0.863655D-01	175.09	1.018275	40.0	0.833179D-02	0.325709D-02	21.35	0.000080
41.0	-0.988046D+00	0.202043D+00	168.44	1.017056	41.0	0.839479D-02	0.712711D-02	40.33	0.000121
42.0	-0.954319D+00	0.317604D+00	161.54	1.017597	42.0	0.736863D-02	0.106079D-01	55.21	0.000167
43.0	-0.903437D+00	0.431437D+00	154.43	1.002963	43.0	0.538791D-02	0.132300D-01	67.84	0.000204
44.0	-0.836471D+00	0.541685D+00	147.07	0.993106	44.0	0.273060D-02	0.146111D-01	79.41	0.000221
45.0	-0.752889D+00	0.6446224D+00	139.36	0.984447	45.0	-0.212562D-03	0.145094D-01	90.84	0.000211

CIRCULAR PP POLARIZATION KA= 20.000

THETA	REAL	IMAG	PHASE	WALS	THETA	REAL	IMAG	PHASE	WALS
45.0	-0.752889D+00	0.646274D+00	139.36	0.984447	45.0	-0.212562D-03	0.145094D-01	90.84	0.000211
46.0	-0.658026D+00	0.742667D+00	131.37	0.979304	46.0	-0.298619D-02	0.128604D-01	103.07	0.000174
47.0	-0.541319D+00	0.828402D+00	123.16	0.979277	47.0	-0.513034D-02	0.979226D-02	117.65	0.000122
48.0	-0.416621D+00	0.900664D+00	114.82	0.984768	48.0	-0.624505D-02	0.561657D-02	138.03	0.000071
49.0	-0.282145D+00	0.956638D+00	106.43	0.994761	49.0	-0.605073D-02	0.794760D-03	172.52	0.000037
50.0	-0.140413D+00	0.993602D+00	98.04	1.006961	50.0	-0.443587D-02	-0.411688D-02	-137.14	0.000037
51.0	0.579253D-02	0.100909D+01	89.67	1.018222	51.0	-0.148470D-02	-0.853697D-02	-99.37	0.000075
52.0	0.153477D+00	0.100106D+01	81.28	1.025666	52.0	-0.252016D-02	-0.119351D-01	-78.08	0.000149
53.0	0.299465D+00	0.968064D+00	72.81	1.026827	53.0	0.712200D-02	-0.139046D-01	-62.58	0.000244
54.0	0.440435D+00	0.909434D+00	64.16	1.021053	54.0	0.117397D-01	-0.142213D-01	-50.46	0.000340
55.0	0.572940D+00	0.825372D+00	55.23	1.009499	55.0	0.157372D-01	-0.128803D-01	-39.30	0.000414
56.0	0.693448D+00	0.717059D+00	45.96	0.995043	56.0	0.185058D-01	-0.101072D-01	-28.64	0.000445
57.0	0.798383D+00	0.586683D+00	36.31	0.981612	57.0	0.195466D-01	-0.633088D-02	-17.95	0.000422
58.0	0.882008D+00	0.437419D+00	26.32	0.973146	58.0	0.185445D-01	-0.213717D-02	-6.57	0.000348
59.0	0.947483D+00	0.273354D+00	16.09	0.972446	59.0	0.154219D-01	0.180959D-02	6.69	0.000241
60.0	0.985077D+00	0.993537D-01	5.76	0.980247	60.0	0.103637D-01	0.485682D-02	25.11	0.000131
61.0	0.994260D+00	-0.791077D-01	-4.55	0.994811	61.0	0.380873D-02	0.645802D-02	59.47	0.000056
62.0	0.972939D+00	-0.256155D+00	-14.75	1.012225	62.0	-0.359252D-02	0.625802D-02	119.86	0.000052
63.0	0.919860D+00	-0.525237D+00	-24.84	1.027355	63.0	-0.110510D-01	0.415656D-02	159.39	0.000139
64.0	0.834827D+00	-0.561861D+00	-34.88	1.035499	64.0	-0.177340D-01	0.340709D-03	178.90	0.000315
65.0	0.718893D+00	-0.719818D+00	-44.90	1.033507	65.0	-0.228711D-01	-0.472117D-02	-168.34	0.000545
66.0	0.574507D+00	-0.831404D+00	-55.36	1.032191	66.0	-0.258564D-01	-0.103243D-01	-158.23	0.000775
67.0	0.405670D+00	-0.915108D+00	-66.10	1.001931	67.0	-0.263337D-01	-0.156114D-01	-149.34	0.000937
68.0	0.217606D+00	-0.966273D+00	-77.34	0.981035	68.0	-0.242518D-01	-0.196771D-01	-140.95	0.000975
69.0	0.173009D-01	-0.982276D+00	-88.99	0.955164	69.0	-0.198813D-01	-0.216957D-01	-132.50	0.000866
70.0	-0.187351D+00	-0.961619D+00	-101.02	0.959811	70.0	-0.137881D-01	-0.210439D-01	-123.24	0.000633
71.0	-0.387548D+00	-0.904042D+00	-113.20	0.967485	71.0	-0.676554D-02	-0.173902D-01	-111.26	0.000348
72.0	-0.574058D+00	-0.810613D+00	-125.31	0.986636	72.0	0.268351D-03	-0.107961D-01	-88.58	0.000117
73.0	-0.737715D+00	-0.683779D+00	-137.17	1.011770	73.0	0.639462D-02	-0.17111D-02	-14.98	0.000044
74.0	-0.869953D+00	-0.527402D+00	-148.77	1.034971	74.0	0.108234D-01	0.903722D-02	39.86	0.000199
75.0	-0.963349D+00	-0.346749D+00	-160.20	1.046275	75.0	0.130114D-01	0.203245D-01	57.37	0.000582
76.0	-0.101214D+01	-0.148439D+00	-171.66	1.046456	76.0	0.127495D-01	0.308507D-01	67.55	0.001114
77.0	-0.101265D+01	0.596781D-01	176.63	1.029030	77.0	0.102074D-01	0.392942D-01	75.44	0.001648
78.0	-0.963670D+00	0.268724D+00	164.42	1.005872	78.0	0.592396D-02	0.444788D-01	82.41	0.002013
79.0	-0.866586D+00	0.469077D+00	151.57	0.971008	79.0	0.744367D-03	0.455321D-01	89.06	0.002074
80.0	-0.725483D+00	0.650764D+00	138.11	0.949820	80.0	-0.429310D-02	0.120157D-01	95.83	0.001784
81.0	-0.546978D+00	0.803932D+00	124.23	0.945432	81.0	-0.810463D-02	0.340070D-01	103.41	0.001222
82.0	-0.339949D+00	0.919411D+00	110.29	0.960881	82.0	-0.973647D-02	0.221196D-01	113.76	0.000584
83.0	-0.115087D+00	0.989316D+00	96.64	0.991995	83.0	-0.850838D-02	0.745624D-02	138.77	0.000128
84.0	0.115663D+00	0.100769D+01	83.45	1.028813	84.0	-0.416402D-02	-0.850246D-02	-116.09	0.000090
85.0	0.339759D+00	0.971056D+00	70.72	1.058385	85.0	0.305616D-02	-0.240638D-01	-82.76	0.000588
86.0	0.544763D+00	0.878960D+00	58.21	1.069337	86.0	0.123976D-01	-0.375228D-01	-71.72	0.001562
87.0	0.719058D+00	0.734292D+00	45.60	1.056229	87.0	0.226501D-01	-0.473721D-01	-64.45	0.002757
88.0	0.852529D+00	0.543455D+00	32.52	1.021219	88.0	0.372753D-01	-0.52951D-01	-58.41	0.003798
89.0	0.937174D+00	0.316220D+00	18.65	0.978289	89.0	0.396172D-01	-0.523152D-01	-52.86	0.004306
90.0	0.967606D+00	0.654512D-01	3.87	0.940546	90.0	0.430918D-01	-0.468807D-01	-47.41	0.004055

CIRCULAR PP POLARIZATION KA= 20.000					CIRCULAR LP POLARIZATION KA= 20.000				
THETA	REAL	IMAG	PHASE	MRCS	THETA	REAL	IMAG	PHASE	MRCS
90.0	0.967606D+00	0.654512D+01	3.87	0.940566	90.0	0.430918D+01	-0.368807D-01	-47.41	0.004055
91.0	0.941435D+00	-0.193635D+00	-11.62	0.923794	91.0	0.414668D-01	-0.368703D-01	-41.64	0.003079
92.0	0.859478D+00	-0.444329D+00	-27.34	0.936131	92.0	0.340579D-01	-0.235168D-01	-34.62	0.001713
93.0	0.725822D+00	-0.669547D+00	-42.69	0.975110	93.0	0.208950D-01	-0.845371D-02	-22.03	0.000508
94.0	0.547690D+00	-0.853086D+00	-57.30	1.027720	94.0	0.280217D-02	0.649370D-02	65.66	0.000050
95.0	0.335152D+00	-0.980910D+00	-71.14	1.074511	95.0	-0.186226D-01	0.195502D-01	133.61	0.000729
96.0	0.106552D+00	-0.104237D+01	-84.48	1.096676	96.0	-0.411347D-01	0.292299D-01	144.60	0.002546
97.0	-0.141617D+00	-0.103121D+01	-97.82	1.083573	97.0	-0.620822D-01	0.345418D-01	150.90	0.005346
98.0	-0.376479D+00	-0.946549D+00	-111.69	1.037729	98.0	-0.786451D-01	0.351295D-01	155.93	0.007419
99.0	-0.588453D+00	-0.792803D+00	-126.59	0.975080	99.0	-0.883141D-01	0.313243D-01	160.47	0.008781
100.0	-0.763633D+00	-0.579989D+00	-142.76	0.919568	100.0	-0.891117D-01	0.240984D-01	164.87	0.008522
101.0	-0.886888D+00	-0.323089D+00	-160.03	0.894507	101.0	-0.799648D-01	0.149233D-01	169.43	0.006617
102.0	-0.954423D+00	-0.410175D-01	-177.54	0.912606	102.0	-0.609188D-01	0.554695D-02	174.80	0.003741
103.0	-0.953970D+00	0.244744D+00	-165.61	0.969959	103.0	-0.332011D-01	-0.227945D-02	-176.07	0.001108
104.0	-0.685510D+00	0.511823D+00	149.97	1.046098	104.0	0.756743D-03	-0.708722D-02	-83.91	0.000051
105.0	-0.751750D+00	0.738824D+00	135.50	1.110989	105.0	0.375870D-01	-0.794639D-02	-111.94	0.001476
106.0	-0.560275D+00	0.907105D+00	121.70	1.136747	106.0	0.732850D-01	-0.405111D-02	-3.63	0.005392
107.0	-0.323350D+00	0.100251D+01	107.88	1.109572	107.0	0.103656D+00	0.219899D-02	1.22	0.010749
108.0	-0.573364D-01	0.101667D+01	93.23	1.036897	108.0	0.124808D+00	0.112417D-01	5.15	0.15703
109.0	0.218269D+00	0.947907D+00	77.03	0.946168	109.0	0.133652D+00	0.205227D-01	8.73	0.018284
110.0	0.482146D+00	0.801542D+00	58.97	0.874934	110.0	0.128324D+00	0.277775D-01	12.21	0.017239
111.0	0.712748D+00	0.589577D+00	39.60	0.855611	111.0	0.108500D+00	0.307924D-01	15.84	0.012720
112.0	0.890011D+00	0.329760D+00	20.33	0.900991	112.0	0.755312D-01	0.277947D-01	20.20	0.006478
113.0	0.997456D+00	0.442993D-01	2.54	0.996881	113.0	0.323895D-01	0.174154D-01	28.81	0.001366
114.0	0.102327D+01	-0.242378D+00	-3.33	1.105833	114.0	-0.165890D-01	0.966651D-03	176.67	0.000276
115.0	0.962294D+00	-0.505422D+00	-27.71	1.181461	115.0	-0.661438D-01	-0.214191D-01	-162.06	0.004834
116.0	0.816624D+00	-0.721957D+00	-61.48	1.188097	116.0	-0.110665D+00	-0.468238D-01	-157.07	0.014439
117.0	0.596011D+00	-0.873131D+00	-55.68	1.117596	117.0	-0.144842D+00	-0.717672D-01	-153.64	0.026130
118.0	0.317474D+00	-0.945862D+00	-71.45	0.995444	118.0	-0.164311D+00	-0.922067D-01	-150.70	0.035500
119.0	0.420386D-02	-0.934080D+00	-89.74	0.872522	119.0	-0.166220D+00	-0.104076D+00	-147.95	0.038461
120.0	-0.316225D+00	-0.839333D+00	-110.64	0.804478	120.0	-0.149638D+00	-0.103900D+00	-145.23	0.033187
121.0	-0.614214D+00	-0.676691D+00	-132.48	0.827085	121.0	-0.115747D+00	-0.894033D-01	-142.32	0.021390
122.0	-0.860881D+00	-0.443945D+00	-152.72	0.938204	122.0	-0.677959D-01	-0.600234D-01	-138.46	0.008199
123.0	-0.103094D+01	-0.180173D+00	-170.09	1.095292	123.0	-0.107543D-01	-0.172493D-01	-122.04	0.000414
124.0	-0.110540D+01	0.962053D-01	175.03	1.231161	124.0	0.490110D-01	0.352939D-01	35.76	0.003648
125.0	-0.107387D+01	0.359699D+00	161.42	1.282570	125.0	0.104843D+00	0.924093D-01	41.28	0.019465
126.0	-0.936050D+00	0.586128D+00	147.95	1.219736	126.0	0.150173D+00	0.146032D+00	44.20	0.043877
127.0	-0.702367D+00	0.745489D+00	132.94	1.063177	127.0	0.179508D+00	0.189598D+00	46.57	0.068171
128.0	-0.393435D+00	0.850886D+00	114.82	0.878797	128.0	0.189080D+00	0.215400D+00	48.72	0.082148
129.0	-0.364590D-01	0.865940D+00	92.54	0.751332	129.0	0.177339D+00	0.217432D+00	50.80	0.078726
130.0	0.327394D+00	0.749543D+00	67.73	0.746456	130.0	0.145203D+00	0.192019D+00	52.90	0.057955
131.0	0.666424D+00	0.658866D+00	44.67	0.878226	131.0	0.960950D-01	0.136619D+00	55.29	0.028433
132.0	0.942305D+00	0.458049D+00	25.92	1.097748	132.0	0.351711D-01	0.603077D-01	59.75	0.004874
133.0	0.112405D+01	0.216809D+00	10.92	1.310505	133.0	-0.304226D-01	-0.361638D-01	-130.07	0.002233
134.0	0.118965D+01	-0.414686D-01	-2.00	1.416978	134.0	-0.932024D-01	-0.140783D+00	-123.51	0.028507
135.0	0.112882D+01	-0.291992D+00	-14.50	1.359491	135.0	-0.145814D+00	-0.241177D+00	-121.16	0.079428

CIRCULAR PP POLARIZATION KA= 20.000					CIRCULAR O ₂ POLARIZATION KA= 20.000				
THETA	REAL	IMAG	PHASE	MRC	THETA	REAL	IMAG	PHASE	MRC
135.0	0.112882D+01	-0.291992D+00	-14.50	1.359491	135.0	-0.145814D+00	-0.241177D+00	-121.16	0.079428
136.0	0.944726D+00	-0.510942D+00	-28.41	1.153570	136.0	-0.182005D+00	-0.323926D+00	-119.33	0.138054
137.0	0.654172D+00	-0.677746D+00	-46.01	0.867280	137.0	-0.197394D+00	-0.376178D+00	-117.69	0.180474
138.0	0.286312D+00	-0.777019D+00	-69.77	0.695734	138.0	-0.190021D+00	-0.387379D+00	-116.13	0.184170
139.0	0.120097D+00	-0.799999D+00	-98.54	0.654422	139.0	-0.160619D+00	-0.350915D+00	-114.59	0.148940
140.0	-0.520685D+00	-0.743323D+00	-124.94	0.826419	140.0	-0.112599D+00	-0.265446D+00	-112.98	0.083129
141.0	-0.870258D+00	-0.619089D+00	-148.57	1.140639	141.0	-0.514176D+01	-0.135723D+00	-110.75	0.021064
142.0	-0.112798D+01	-0.434204D+00	-158.95	1.460872	142.0	-0.155810D+01	0.272715D+01	60.26	0.000987
143.0	-0.126110D+01	-0.209072D+00	-170.59	1.636643	143.0	0.805322D+01	0.206958D+00	68.74	0.049317
144.0	-0.125412D+01	0.342166D+01	178.44	1.573997	144.0	0.135758D+00	0.382570D+00	70.46	0.164790
145.0	-0.110126D+01	0.272040D+00	166.12	1.266779	145.0	0.174751D+00	0.531263D+00	71.79	0.312778
146.0	-0.817465D+00	0.481514D+00	149.50	0.900107	146.0	0.192971D+00	0.630762D+00	72.09	0.435054
147.0	-0.432349D+00	0.642676D+00	123.93	0.599959	147.0	0.188395D+00	0.662045D+00	74.12	0.473796
148.0	0.117228D+01	0.740335D+00	89.09	0.548234	148.0	0.161761D+00	0.612481D+00	75.21	0.401300
149.0	0.464160D+00	0.765472D+00	58.77	0.801402	149.0	0.116467D+00	0.477831D+00	76.30	0.241887
150.0	0.871825D+00	0.756051D+00	39.40	1.272807	150.0	0.581392D+01	0.264022D+00	77.58	0.073088
151.0	0.118522D+01	0.597072D+00	26.74	1.761250	151.0	-0.607574D+02	-0.123225D+01	-116.25	3.000189
152.0	0.136449D+01	0.420093D+00	17.11	2.038368	152.0	-0.684058D+01	-0.324543D+00	-101.90	0.110008
153.0	0.138443D+01	0.202041D+00	8.30	1.957464	153.0	-0.121419D+00	-0.637885D+00	-100.78	0.421640
154.0	0.123800D+01	-0.361070D+01	-1.68	1.533961	154.0	-0.158939D+00	-0.912639D+00	-99.88	0.858172
155.0	0.937712D+00	-0.272798D+00	-16.22	0.953723	155.0	-0.176794D+00	-0.110826D+01	-99.06	1.259493
156.0	0.514792D+00	-0.484949D+00	-43.29	0.500186	156.0	-0.173300D+00	-0.118809D+01	-98.30	1.441593
157.0	0.160205D+01	-0.652999D+00	-88.59	0.426664	157.0	-0.149430D+00	-0.112427D+01	-97.57	1.286316
158.0	-0.501348D+00	-0.761165D+00	-123.37	0.830708	158.0	-0.108634D+00	-0.902424D+00	-96.87	0.825841
159.0	-0.479940D+00	-0.799100D+00	-140.69	1.591126	159.0	-0.563545D+01	-0.524372D+00	-96.13	0.278142
160.0	-0.134979D+01	-0.762737D+00	-150.53	2.403711	160.0	0.709514D+03	-0.122104D+01	-86.67	0.000150
161.0	-0.157460D+01	-0.654539D+00	-157.43	2.977787	161.0	0.554807D+01	0.593030D+00	84.66	0.354762
162.0	-0.161819D+01	-0.483162D+00	-163.38	2.897997	162.0	0.101412D+00	0.123195D+01	85.29	1.527997
163.0	-0.146835D+01	-0.262569D+00	-169.86	2.225007	163.0	0.133305D+00	0.183048D+01	85.83	3.368435
164.0	-0.113463D+01	-0.106887D+01	-179.46	1.287505	164.0	0.147928D+00	0.230517D+01	86.33	5.335695
165.0	-0.647535D+00	0.252245D+00	158.72	0.442929	165.0	0.144362D+00	0.257001D+01	86.78	6.625794
166.0	-0.551795D+01	0.505519D+00	96.23	0.258594	166.0	0.124030D+00	0.254412D+01	87.21	6.487946
167.0	0.582210D+00	0.727630D+00	51.42	0.817523	167.0	0.904719D+01	0.215970D+01	87.60	4.672476
168.0	0.119934D+01	0.908614D+00	37.15	2.263986	168.0	0.584039D+01	0.136942D+01	87.97	1.877672
169.0	0.173353D+01	0.103008D+01	30.72	4.066171	169.0	0.403323D+02	0.152444D+00	88.49	0.023316
170.0	0.213218D+01	0.108746D+01	27.02	5.726777	170.0	-0.372586D+01	-0.148037D+01	-91.44	2.192871
171.0	0.235908D+01	0.107985D+01	24.60	6.731145	171.0	-0.704981D+01	-0.348658D+01	-91.16	12.161189
172.0	0.239846D+01	0.101203D+01	22.88	6.776811	172.0	-0.922669D+01	-0.579710D+01	-90.91	33.545378
173.0	0.225722D+01	0.893934D+00	21.61	5.894143	173.0	-0.101023D+00	-0.829088D+01	-90.70	68.748956
174.0	0.196352D+01	0.739672D+00	20.64	4.402521	174.0	-0.972259D+01	-0.108610D+02	-90.51	117.970105
175.0	0.156341D+01	0.566158D+00	19.91	2.764774	175.0	-0.831747D+01	-0.133629D+02	-90.36	178.574710
176.0	0.111491D+01	0.391567D+00	19.35	1.396360	176.0	-0.625737D+01	-0.156547D+02	-90.23	245.074325
177.0	0.680771D+00	0.233676D+00	18.94	0.518053	177.0	-0.399076D+01	-0.176013D+02	-90.13	309.804888
178.0	0.320492D+00	0.108271D+00	18.67	0.114438	178.0	-0.197138D+01	-0.190847D+02	-90.06	364.226576
179.0	0.829056D+01	0.274610D+01	18.50	0.007643	179.0	-0.586018D+02	-0.200135D+02	-90.02	400.541148
180.0	0.297228D+01	0.206025D+01	41.83	0.000000	180.0	-0.938599D+03	-0.202329D+02	-90.00	413.298468

THETA PP POLARIZATION KA= 25.000 CIRCULAR OP POLARIZATION KA= 25.000

THETA	REAL	IMAG	PHASE	MNCS	THETA	REAL	IMAG	PHASE	MNCS
0.0	-0.974048D+00	0.227657D+00	166.84	1.000598	0.0	0.128977D-11	0.481642D-11	75.01	0.000000
1.0	-0.973267D+00	0.230263D+00	166.69	1.000271	1.0	-0.157111D-03	-0.371890D-03	-112.58	0.000000
2.0	-0.970970D+00	0.237968D+00	166.23	0.999412	2.0	-0.568484D-03	-0.143813D-02	-112.11	0.000002
3.0	-0.967278D+00	0.250484D+00	165.48	0.999349	3.0	-0.116072D-02	-0.277233D-02	-111.30	0.000001
4.0	-0.962335D+00	0.267197D+00	164.48	0.997511	4.0	-0.171621D-02	-0.459073D-02	-110.10	0.000025
5.0	-0.956323D+00	0.287637D+00	163.26	0.997293	5.0	-0.207438D-02	-0.723198D-02	-108.41	0.000043
6.0	-0.949268D+00	0.311158D+00	161.85	0.997929	6.0	-0.209576D-02	-0.727294D-02	-106.07	0.000057
7.0	-0.941110D+00	0.337216D+00	160.29	0.998404	7.0	-0.171445D-02	-0.756124D-02	-102.78	0.000060
8.0	-0.931622D+00	0.365407E+00	158.58	1.004441	8.0	-0.958712E-03	-0.696873E-02	-97.83	0.000049
9.0	-0.920406D+00	0.395482D+00	156.75	1.003553	9.0	0.498755E-04	-0.551746D-02	-89.48	0.000030
10.0	-0.906925D+00	0.427375D+00	154.77	1.005162	10.0	0.111903D-02	-0.338490D-02	-71.68	0.000013
11.0	-0.890545D+00	0.461113D+00	152.62	1.005747	11.0	0.202593D-02	-0.856182D-03	-22.91	0.000005
12.0	-0.870607D+00	0.497033D+00	150.28	1.004998	12.0	0.256640D-02	-0.168010D-02	33.21	0.000009
13.0	-0.846489D+00	0.535149D+00	147.70	1.002929	13.0	0.260380D-02	0.383190D-02	55.85	0.000022
14.0	-0.817672D+00	0.575615D+00	144.86	0.999920	14.0	0.210223D-02	0.528549D-02	68.31	0.00003
15.0	-0.783768D+00	0.618358D+00	141.73	0.996660	15.0	0.143450D-02	0.579704D-02	78.84	0.000035
16.0	-0.744539D+00	0.663073D+00	138.11	0.994005	16.0	-0.846921D-04	0.530720D-02	90.91	0.000028
17.0	-0.699872D+00	0.713177D+00	134.62	0.992753	17.0	-0.132261D-02	0.392004D-02	108.64	0.000017
18.0	-0.649739D+00	0.755812E+00	130.66	0.993813	18.0	-0.229119D-02	0.169585D-02	140.39	0.000009
19.0	-0.594151D+00	0.801876D+00	126.54	0.996021	19.0	-0.275129D-02	-0.391829D-03	-171.89	0.000008
20.0	-0.533101E+00	0.846091D+00	122.21	1.000067	20.0	-0.255793D-02	-0.252088D-02	-135.42	0.000013
21.0	-0.466539D+00	0.887085E+00	117.74	1.004577	21.0	-0.169703D-02	-0.409600D-02	-112.50	0.000020
22.0	-0.394362D+00	0.923484D+00	113.12	1.008344	22.0	-0.296177D-03	-0.487159D-02	-93.52	0.000023
23.0	-0.316499D+00	0.953988D+00	108.35	1.010251	23.0	0.139444D-02	-0.451853D-02	-72.99	0.000023
24.0	-0.237718D+00	0.977473D+00	103.39	1.009608	24.0	0.304907E-02	-0.351386D-02	-47.72	0.000021
25.0	-0.143218D+00	0.992921D+00	98.21	1.006403	25.0	0.433150E-02	-0.143673D-02	-18.35	0.000021
26.0	-0.482189D-01	0.999521D+00	92.76	1.001367	26.0	0.496448D-02	0.819843D-03	9.38	0.010025
27.0	0.516942D-01	0.996575D+00	87.03	0.995834	27.0	0.479403D-02	0.296622D-02	31.75	0.000032
28.0	0.155558D+00	0.983459D+00	81.01	0.991389	28.0	0.362741D-02	0.455888D-02	49.98	0.000035
29.0	0.202040D+00	0.959565D+00	74.73	0.989411	29.0	0.225014D-02	0.524690D-02	66.88	0.000033
30.0	0.369269D+00	0.924266D+00	68.22	0.990623	30.0	0.347417D-03	0.488423D-02	85.90	0.000024
31.0	0.475259D+00	0.776892D+00	61.11	0.994811	31.0	-0.145591D-02	0.336248D-02	113.41	0.000013
32.0	0.577638D+00	0.816785D+00	54.73	1.000803	32.0	-0.277568D-02	0.103185D-02	159.57	0.000009
33.0	0.673942D+00	0.793353D+00	47.80	1.006771	33.0	-0.330311D-02	-0.174448D-02	-152.16	0.000014
34.0	0.761697D+00	0.656199D+00	40.74	1.010777	34.0	-0.288630D-02	-0.447267D-02	-122.83	0.000028
35.0	0.838506D+00	0.555244D+00	33.51	1.011410	35.0	-0.157234D-02	-0.664620D-02	-103.31	0.000047
36.0	0.902141D+00	0.440974D+00	26.05	1.008316	36.0	0.303213D-03	-0.784753D-02	-87.15	0.000062
37.0	0.956575D+00	0.318476D+00	18.30	1.002409	37.0	0.259160D-02	-0.784702D-02	-71.72	0.000068
38.0	0.981960D+00	0.177231D+00	10.23	0.995456	38.0	0.453759D-02	-0.664016D-02	-55.65	0.000065
39.0	0.994703D+00	0.320463D-01	1.85	0.990462	39.0	0.574878D-02	-0.446434D-02	-37.83	0.000053
40.0	0.987380D+00	-0.117953D+00	-6.11	0.988832	40.0	0.586280D-02	-0.175801D-02	-16.69	0.000037
41.0	0.958791D+00	-0.268929D+00	-15.67	0.991603	41.0	0.477809D-02	0.921217D-03	11.05	0.000021
42.0	0.908070D+00	-0.416584D+00	-24.65	0.998019	42.0	0.240068D-02	0.300662D-02	51.39	0.000015
43.0	0.834471D+00	-0.556364D+00	-33.69	1.005882	43.0	-0.757920D-03	0.403971D-02	100.63	0.000017
44.0	0.738139D+00	-0.683670D+00	-42.61	1.012262	44.0	-0.423462D-02	0.377145D-02	138.31	0.000032
45.0	0.619663D+00	-0.794057D+00	-52.03	1.014524	45.0	-0.741051D-02	0.222554D-02	163.28	0.000060

CIRCULAR PP POLARIZATION KA= 25.000					CIRCULAR OP POLARIZATION KA= 25.000				
THETA	REAL	IMAG	PHASE	MECS	THETA	REAL	IMAG	PHASE	MECS
45.0	0.619663D+00	-0.794067D+00	-52.03	1.014524	45.0	-0.741051D-02	0.222554D-02	163.28	0.000060
46.0	0.480576D+00	-0.683469D+00	-61.46	1.011471	46.0	-0.969321D-02	-0.290983D-03	-178.28	0.000094
47.0	0.323458D+00	-0.948283D+00	-71.17	1.003866	47.0	-0.106393D-01	-0.313524D-02	-163.09	0.000124
48.0	0.152047D+00	-0.985519D+00	-81.23	0.994365	48.0	-0.100525D-01	-0.552767D-02	-149.47	0.000136
49.0	-0.287467D-01	-0.992872D+00	-91.66	0.986620	49.0	-0.803496D-02	-0.769557D-02	-136.27	0.000124
50.0	-0.212921D+00	-0.968789D+00	-102.40	0.983687	50.0	-0.497513D-01	-0.795555D-02	-122.01	0.000088
51.0	-0.393592D+00	-0.912544D+00	-113.32	0.987651	51.0	-0.149700D-02	-0.648642D-02	-103.00	0.000044
52.0	-0.563309D+00	-0.828329D+00	-124.35	0.996836	52.0	0.170007D-02	-0.330598D-02	-62.79	0.000014
53.0	-0.714460D+00	-0.705381D+00	-135.37	1.008015	53.0	0.394964D-02	0.116670D-02	16.46	0.000017
54.0	-0.839722D+00	-0.558119D+00	-146.39	1.016629	54.0	0.478390D-02	0.622993D-02	52.48	0.000062
55.0	-0.932529D+00	-0.386299D+00	-157.50	1.018838	55.0	0.404258D-02	0.110110D-01	69.84	0.000138
56.0	-0.987509D+00	-0.195129D+00	-168.82	1.013249	56.0	0.192488D-02	0.145397D-01	82.50	0.000218
57.0	-0.100084D+01	0.865239D-02	179.50	1.001760	57.0	-0.103470D-02	0.163724D-01	93.60	0.000269
58.0	-0.970541D+00	0.216992D+00	167.44	0.989036	58.0	-0.404745D-02	0.158420D-01	104.33	0.000267
59.0	-0.896619D+00	0.420433D+00	154.48	0.980689	59.0	-0.625886D-02	0.135150D-01	115.62	0.000210
60.0	-0.781151D+00	0.608802D+00	142.07	0.980836	60.0	-0.690260D-02	0.843813D-02	129.28	0.000119
61.0	-0.628256D+00	0.771605D+00	129.15	0.990080	61.0	-0.549564D-02	0.279275D-02	153.06	0.000038
62.0	-0.443989D+00	0.893757D+00	116.29	1.004889	62.0	-0.186803D-02	-0.284751D-02	-124.28	0.000012
63.0	-0.236177D+00	0.981357D+00	103.53	1.018840	63.0	0.528155D-02	-0.759519D-02	-66.63	0.000068
64.0	-0.134978D-01	0.101249D+01	90.80	1.025747	64.0	0.942504D-02	-0.105193D-01	-48.14	0.000199
65.0	0.211309D+00	0.987982D+00	77.93	1.020760	65.0	0.153379D-01	-0.112200D-01	-36.19	0.000361
66.0	0.428745D+00	0.906394D+00	64.70	1.006395	66.0	0.198047D-01	-0.973203D-02	-26.17	0.000487
67.0	0.626262D+00	0.772123D+00	50.95	0.988376	67.0	0.217593D-01	-0.657224D-02	-16.81	0.000517
68.0	0.791819D+00	0.590549D+00	36.69	0.975131	68.0	0.255136D-01	-0.261449D-02	-7.34	0.000428
69.0	0.914369D+00	0.370732D+00	22.07	0.973513	69.0	0.159260D-01	0.864582D-03	3.45	0.000255
70.0	0.984392D+00	0.127129D+00	7.36	0.985189	70.0	0.846973D-02	0.318173D-03	20.59	0.000082
71.0	0.994794D+00	-0.125605D+00	-7.20	1.005391	71.0	-0.815909D-03	0.325621D-02	104.07	0.000011
72.0	0.941753D+00	-0.371387D+00	-21.51	1.024642	72.0	-0.104922D-01	0.914130D-03	175.02	0.000111
73.0	0.825463D+00	-0.593063D+00	-35.70	1.033114	73.0	-0.189745D-01	-0.351658D-02	-169.50	0.000372
74.0	0.650671D+00	-0.776048D+00	-50.02	1.025623	74.0	-0.248402D-01	-0.912766D-02	-159.82	0.000700
75.0	0.426885D+00	-0.906929D+00	-64.79	1.004750	75.0	-0.270897D-01	-0.145809D-01	-151.71	0.000946
76.0	0.166171D+00	-0.975692D+00	-80.22	0.980257	76.0	-0.253723D-01	-0.183652D-01	-144.10	0.000981
77.0	-0.107524D+00	-0.976273D+00	-96.29	0.964570	77.0	-0.200615D-01	-0.191206D-01	-136.38	0.000768
78.0	-0.379544D+00	-0.907126D+00	-112.70	0.964931	78.0	-0.121969D-01	-0.159744D-01	-127.39	0.000403
79.0	-0.626100D+00	-0.771547D+00	-129.06	0.971286	79.0	-0.328540D-02	-0.871898D-02	-110.65	0.000087
80.0	-0.826177D+00	-0.577706D+00	-145.04	1.016333	80.0	0.499863D-02	0.191749D-02	20.95	0.000029
81.0	-0.951542D+00	-0.338360D+00	-160.61	1.039064	81.0	0.111634D-01	0.144430D-01	52.30	0.000333
82.0	-0.101669D+01	0.703556D+00	-176.05	1.023651	82.0	0.142418D-01	0.267802D-01	62.04	0.000919
83.0	-0.990462D+00	0.205486D+00	168.22	1.023651	83.0	0.138747D-01	0.365983D-01	68.24	0.001532
84.0	-0.877136D+00	0.470422D+00	151.79	0.990654	84.0	0.106580D-01	0.417713D-01	75.69	0.001858
85.0	-0.686383D+00	0.699436D+00	134.48	0.990958	85.0	0.575599D-02	0.408115D-01	81.97	0.001699
86.0	-0.435159D+00	0.872991D+00	116.44	0.951476	86.0	0.795143D-03	0.332180D-01	88.63	0.001104
87.0	-0.143975D+00	0.973926D+00	98.41	0.959252	87.0	-0.258119D-02	0.196588D-01	97.48	0.000393
88.0	0.160434D+00	0.990324D+00	80.80	1.006461	88.0	-0.308328D-02	0.193780D-02	147.85	0.000113
89.0	0.449814D+00	0.911713D+00	63.87	1.0467	89.0	-0.148800D-03	-0.172609D-01	-90.49	0.000298
90.0	0.696663D+00	0.757349D+00	47.39	1.045916	90.0	-0.584992D-02	-0.346164D-01	-80.46	0.001246

CIRCULAR PP POLARIZATION K_A = 25.000 CIRCULAR OP POLARIZATION K_A = 25.000

WETA	REAL	IMAG	PHASE	MRCS	THETA	REAL	IMAG	PHASE	MRCS
90.0	0.69663D+00	0.757349D+00	47.39	1.058916	90.0	0.564992D+02	-0.348164D+01	-80.46	0.001246
91.0	0.876978D+00	0.522519D+00	30.79	1.042110	91.0	0.135975D+01	-0.477253D+01	-74.10	0.002463
92.0	0.972747D+00	0.232413D+00	13.44	1.000252	92.0	0.210510D+01	-0.536639D+01	-68.58	0.003323
93.0	0.973890D+00	-0.862694D+01	15.00	0.955904	93.0	0.258516D+01	-0.514484D+01	-63.32	0.003315
94.0	0.879374D+00	-0.402117D+00	-24.57	0.935173	94.0	0.258577D+01	-0.412959D+01	-57.94	0.002374
95.0	0.698030D+00	-0.682046D+00	-44.34	0.952434	95.0	0.197061D+01	-0.248272D+01	-51.56	0.001005
96.0	0.446935D+00	-0.894879D+00	-63.46	1.000560	96.0	0.723624D+02	-0.479744D+02	-33.54	0.000075
97.0	0.150896D+00	-0.101507D+01	-81.54	1.053138	97.0	0.102608D+01	0.153988D+01	123.68	0.000342
98.0	-0.160341D+00	-0.102613D+01	-98.88	1.078655	98.0	-0.301163D+01	0.323656D+01	132.94	0.001955
99.0	-0.454852E-03	-0.923359D+00	-116.23	1.059297	99.0	-0.486562D+01	0.433422D+01	138.31	0.004246
100.0	-0.701720D+00	-0.714734D+00	-134.47	1.003255	100.0	-0.618434D+01	0.467410D+01	142.92	0.006009
101.0	-0.872370D+00	-0.421773D+00	-154.25	0.943184	101.0	-0.660793D+01	0.424427D+01	147.29	0.006168
102.0	-0.952844D+00	-0.767069D+01	-175.40	0.913787	102.0	-0.590162D+01	0.317944D+01	151.68	0.004494
103.0	-0.972736D+00	0.280430D+00	163.17	0.938639	103.0	-0.402099D+01	0.173270D+01	156.69	0.001917
104.0	-0.798674D+00	0.606560D+00	142.78	1.005795	104.0	-0.114605D+01	0.216431D+02	169.31	0.000136
105.0	-0.578947D+00	0.860442E+00	123.92	1.074400	105.0	0.232615D+01	-0.106239D+01	-24.55	0.000654
106.0	-0.290959D+00	0.101057D+01	106.06	1.058899	106.0	0.83346D+01	-0.187162D+01	-17.79	0.003753
107.0	0.339023D+01	0.103483D+01	88.12	1.072018	107.0	0.373903D+01	-0.210480D+01	-13.54	0.008080
108.0	0.358723D+00	0.928773D+00	68.88	0.991302	108.0	0.104482D+00	-0.180407D+01	-9.80	0.011238
109.0	0.645022D+00	0.764354D+00	47.52	0.912167	109.0	0.105170D+01	-0.114824D+01	-6.23	0.011193
110.0	0.857209D+00	0.369423D+00	24.43	0.846458	110.0	0.877159D+01	-0.407492D+02	-2.66	0.007711
111.0	0.967066D+00	0.244480D+01	1.45	0.935815	111.0	0.534910D+01	0.126636D+02	1.38	0.002863
112.0	0.957700D+00	-0.342492D+01	-19.68	1.034489	112.0	0.707192D+02	0.220346D+02	17.51	0.000055
113.0	0.826418D+00	-0.662421D+00	-38.71	1.121768	113.0	-0.443152D+01	-0.232556D+02	-177.00	0.001969
114.0	0.586020D+00	-0.891929D+00	-56.69	1.138957	114.0	-0.319437D+01	-0.116010D+01	-172.76	0.008569
115.0	0.264174D+00	-0.999509D+00	-75.20	1.068606	115.0	-0.127084D+00	-0.234922D+01	-169.53	0.016597
116.0	-0.992611D+01	-0.970196D+00	-55.84	0.951133	116.0	-0.142564D+00	-0.340899D+01	-166.55	0.021487
117.0	-0.456641D+00	-0.807984D+00	-119.48	0.865116	117.0	-0.134363D+00	-0.393146D+01	-163.69	0.019599
118.0	-0.759413D+00	-0.535563D+00	-144.81	0.865337	118.0	-0.102398D+00	-0.355787D+01	-150.64	0.011751
119.0	-0.963178D+00	-0.191340D+00	-164.76	0.964323	119.0	-0.508945D+01	-0.209345D+01	-157.64	0.003029
120.0	-0.103559D+01	0.175887D+00	170.36	1.104178	120.0	0.121341D+01	0.410104D+02	18.67	0.000164
121.0	-0.962828D+00	0.513871D+00	157.91	1.191102	121.0	0.761365D+01	0.361987D+01	25.43	0.007107
122.0	-0.749216D+00	0.774475D+00	134.05	1.161135	122.0	0.129813D+00	0.694958D+01	28.16	0.021681
123.0	-0.421533D+00	0.920723D+00	114.60	1.024422	123.0	0.165449D+00	0.965270D+01	30.61	0.035935
124.0	-0.244229D+01	0.932293D+00	91.50	0.869766	124.0	0.169317D+00	0.109686D+00	32.94	0.040699
125.0	0.384920D+00	0.808576D+00	64.54	0.901958	125.0	0.146082D+00	0.102963D+00	35.18	0.031941
126.0	0.744805D+00	0.568635D+00	37.37	0.878308	126.0	0.964261D+01	0.736005D+01	37.35	0.014715
127.0	0.998396D+00	0.249375D+00	14.02	1.059882	127.0	0.282287D+01	0.232886D+01	39.52	0.001339
128.0	0.110292D	-0.101855D+00	-5.28	1.226810	128.0	-0.469859D+01	-0.414327D+01	-138.59	0.003924
129.0	0.103725D	-0.432438D+00	-22.62	1.262899	129.0	-0.116002D+00	-0.109774D+00	-136.58	0.025507
130.0	0.806465D+00	-0.693370D+00	-40.69	1.131147	130.0	-0.166297D+00	-0.168310D+00	-134.66	0.055983
131.0	0.442378D+00	-0.846426D+00	-62.41	0.912135	131.0	-0.188354D+00	-0.203406D+00	-132.80	0.076851
132.0	-0.263787D+03	-0.869505D+00	-90.02	0.756735	132.0	-0.177507D+00	-0.204055D+00	-131.02	0.073147
133.0	-0.451682D+00	-0.761846D+00	-120.66	0.744125	133.0	-0.134947D+00	-0.164566D+00	-129.35	0.045299
134.0	-0.037935D+00	-0.540227D+00	-147.19	0.993931	134.0	-0.676607D+01	-0.866474D+01	-127.99	0.012086
135.0	-0.109312D+01	-0.240119D+00	-167.61	1.252565	135.0	0.127053D+01	0.200397D+01	57.63	0.000563

CIRCULAR PP POLARIZATION KA= 25.000					CIRCULAR OP POLARIZATION KA= 25.000				
THETA	REAL	IMAG	PHASE	MBCS	THETA	REAL	IMAG	PHASE	MBCS
135.0	-0.109312D+01	-0.240119D+00	-167.61	1.252565	135.0	0.127053D-01	0.200397D-01	57.63	0.000563
136.0	-0.117067D+01	0.977824D-01	175.52	1.379366	136.0	0.918829D-01	0.138486D+00	56.44	0.027621
137.0	-0.105316D+01	0.404378D+00	158.99	1.272670	137.0	0.155519D+00	0.248845D+00	57.78	0.085131
138.0	-0.754622D+00	0.650031D+00	139.26	0.991995	138.0	0.192011D+00	0.322147D+00	59.20	0.140650
139.0	-0.321455D+00	0.771860D+00	112.09	0.730375	139.0	0.198354D+00	0.344779D+00	60.59	0.156646
140.0	0.175263D+00	0.809318D+00	77.78	0.685713	140.0	0.161827D+00	0.302890D+00	61.89	0.117929
141.0	0.650980D+00	0.701225D+00	47.13	0.915952	141.0	0.100015D+00	0.195933D+00	62.93	0.048364
142.0	0.102198D+01	0.485773D+00	25.42	1.280424	142.0	0.201375D-01	0.352833D-01	60.66	0.001689
143.0	0.120265D+01	0.197559D+00	9.20	1.280055	143.0	-0.634888D-01	-0.152729D+00	-112.57	0.027357
144.0	0.120621D+01	-0.179289D+00	-5.58	1.468839	144.0	-0.135589D+00	-0.238466D+00	-111.95	0.131594
145.0	0.976830D+00	-0.411410D+00	-22.84	1.123455	145.0	-0.183014D+00	-0.478431D+00	-110.93	0.262390
146.0	0.567660D+00	-0.637482D+00	-48.32	0.728521	146.0	-0.197145D+00	-0.544914D+00	-109.89	0.335797
147.0	0.477766D+00	-0.761583D+00	-86.41	0.582231	147.0	-0.175516D+00	-0.512523D+00	-108.90	0.293486
148.0	-0.491487D+00	-0.765237D+00	-122.71	0.827146	148.0	-0.122271D+00	-0.371778D+00	-108.10	0.154959
149.0	-0.953387D+00	-0.648753D+00	-145.74	1.227929	149.0	-0.473556D-01	-0.142695D+00	-108.37	0.022607
150.0	-0.124844D+01	-0.431047D+00	-160.95	1.744388	150.0	0.352261D-01	0.149001D+00	76.70	0.023442
151.0	-0.137069D+01	-0.146519D+00	-173.67	1.765677	151.0	0.110335D+00	0.451566D+00	76.27	0.216086
152.0	-0.114960D+01	0.160299D+00	-172.06	1.347276	152.0	0.164262D+00	0.708567D+00	76.91	0.526219
153.0	-0.760047D+00	0.441672D+00	149.84	0.772737	153.0	0.187434D+00	0.856530D+00	77.66	0.768832
154.0	-0.218228D+00	0.653972D+00	108.45	0.475303	154.0	0.176128D+00	0.854368D+00	78.38	0.764388
155.0	0.379128D+00	0.764300D+00	63.62	0.727893	155.0	0.133095D+00	0.683532D+00	78.98	0.484931
156.0	0.521772D+00	0.755410D+00	39.34	1.820307	156.0	0.669326D-01	0.345976D+00	79.05	0.124179
157.0	0.130600D+01	0.628223D+00	25.69	2.100252	157.0	-0.964535D-02	-0.115004D+00	-94.79	0.013319
158.0	0.145423D+01	0.401589D+00	15.44	2.276059	158.0	-0.822560D-01	-0.627535D+00	-97.47	0.400572
159.0	0.133041D+01	0.109376D+00	4.70	1.781956	159.0	-0.137791D+00	-0.470803D+01	-97.15	1.224663
160.0	0.948143D+00	-0.204638D+00	-12.18	0.940851	160.0	-0.166504D+00	-0.142536D+01	-96.66	2.059376
161.0	0.169837D+00	-0.493272D+00	-53.14	0.380087	161.0	-0.164115D+00	-0.151847D+01	-96.17	2.322682
162.0	-0.32630D+00	-0.712862D+00	-113.05	0.400141	162.0	-0.132465D+00	-0.131493D+01	-95.74	1.746547
163.0	-0.948574D+00	-0.829575D+00	-138.83	1.547988	163.0	-0.780281D-01	-0.797323D+00	-95.59	0.641812
164.0	-0.144412D+01	-0.824193D+00	-150.29	2.764767	164.0	-0.123516D-01	-0.437943D-02	-160.48	0.030172
165.0	-0.169088D+01	-0.694711D+00	-157.66	3.341704	165.0	0.522047D-01	0.965436D+00	86.90	0.934792
166.0	-0.163145D+01	-0.456406D+00	-164.37	2.869945	166.0	0.103950D+00	0.195954D+01	86.96	3.450617
167.0	-0.126129D+01	-0.139419D+00	-173.69	1.610284	167.0	0.134264D+00	0.278610D+01	87.24	7.780368
168.0	-0.630394D+00	0.215743D+00	143.11	0.443922	168.0	0.139929D+00	0.323679D+01	87.54	10.494128
169.0	0.165076D+00	0.564112D+00	73.69	0.345473	169.0	0.119443D+00	0.311467D+01	87.80	9.716705
170.0	0.999909D+00	0.862682D+00	40.79	1.744039	170.0	0.808495D-01	0.224477D+01	87.96	5.135714
171.0	0.174245D+01	0.107643D+01	31.71	4.194892	171.0	0.319048D-01	0.598839D+00	86.95	0.359626
172.0	0.227868D+01	0.118311D+01	27.44	6.592131	172.0	-0.176525D-01	-0.183267D+01	-90.54	3.544742
173.0	0.253292D+01	0.117606D+01	24.91	7.998808	173.0	-0.591118D-01	-0.508198D+01	-90.67	25.830046
174.0	0.248167D+01	0.106487D+01	23.22	7.292622	174.0	-0.86441D-01	-0.880600D+01	-90.56	77.563765
175.0	0.215746D+01	0.873586D+00	22.04	5.417786	175.0	-0.976007D-01	-0.127848D+01	-90.44	163.461012
176.0	0.162244D+01	0.636971D+00	21.20	3.102669	176.0	-0.941471D-01	-0.166926D+02	-90.32	278.650681
177.0	0.105133D+01	0.345243D+00	20.60	1.261509	177.0	-0.810001D-01	-0.201886D+02	-90.23	147.584880
178.0	0.511135D+00	0.188115D+00	20.21	0.296650	178.0	-0.647259D-01	-0.229531D+02	-90.16	526.470818
179.0	0.134723D+00	0.489717D-01	19.98	0.020549	179.0	-0.517998D-01	-0.272580D+02	-90.12	611.366630
180.0	0.551300D-10	0.202942D-09	74.80	0.000000	180.0	-0.469211D-01	-0.253364D+02	-90.11	641.933135

CIRCULAR PP POLARIZATION KA= 30.000

THETA	REAL	IMAG	PHASE	NRCS	THETA	REAL	IMAG	PHASE	NRCS
0.0	0.952255D+00	0.330628D+00	19.15	1.016100	0.0	0.178767E-11	-0.521200D-11	-71.07	0.000000
1.0	0.952527D+00	0.327789D+00	18.99	1.016754	1.0	0.226511D-03	0.335024D-03	55.94	0.000000
2.0	0.953441D+00	0.319393D+00	18.52	1.011061	2.0	0.827394D-03	0.125136D-02	56.53	0.000002
3.0	0.955226D+00	0.305785D+00	17.75	1.005961	3.0	0.159122D-02	0.250394D-02	57.56	0.000009
4.0	0.958170D+00	0.287450D+00	16.70	1.000718	4.0	0.224011D-02	0.375029D-02	59.15	0.000019
5.0	0.962495D+00	0.264909D+00	15.39	0.996573	5.0	0.251780D-02	0.463351D-02	61.48	0.000028
6.0	0.968235D+00	0.238598D+00	13.84	0.994807	6.0	0.227268D-02	0.487019D-02	64.98	0.000029
7.0	0.975154D+00	0.208770D+00	12.08	0.994510	7.0	0.151028D-02	0.432267D-02	70.74	0.000021
8.0	0.982725D+00	0.175440D+00	10.12	0.996528	8.0	0.398563D-03	0.303777D-02	82.53	0.000009
9.0	0.990165D+00	0.138380D+00	7.96	0.999578	9.0	-0.776634D-03	0.124271D-02	122.00	0.000002
10.0	0.996537D+00	0.971786D-01	5.57	1.002531	10.0	-0.169413D-02	-0.704288D-03	-157.43	0.000003
11.0	0.100086D+01	0.513481D-01	2.94	1.004362	11.0	-0.209232D-02	-0.239503D-02	-131.15	0.000010
12.0	0.100229D+01	0.454654D-01	0.95	1.004884	12.0	-0.185544D-02	-0.346892D-02	-118.14	0.000015
13.0	0.999917D+00	-0.557472D-01	-3.19	1.002982	13.0	-0.104529D-02	-0.370185D-02	-105.77	0.000015
14.0	0.993306D+00	-0.117211D+00	-6.73	1.000396	14.0	0.101153D-03	-0.306492D-02	-88.11	0.000009
15.0	0.981937D+00	-0.183547D+00	-10.55	0.997890	15.0	0.124040D-02	-0.173707D-02	-54.47	0.000005
16.0	0.965364D+00	-0.254022D+00	-14.74	0.996956	16.0	0.201980D-02	-0.664342D-04	-1.88	0.000004
17.0	0.943066D+00	-0.327631D+00	-19.16	0.996715	17.0	0.218212D-02	0.151198D-02	34.72	0.000007
18.0	0.914358D+00	-0.403192D+00	-23.80	0.998814	18.0	0.184540D-02	0.258366D-02	57.51	0.000009
19.0	0.878369D+00	-0.479455D+00	-28.83	1.001408	19.0	0.533495D-03	0.286050D-02	79.44	0.000008
20.0	0.834078D+00	-0.555197D+00	-33.65	1.003930	20.0	-0.873737D-03	0.225811D-02	110.71	0.000006
21.0	0.780427D+00	-0.629265D+00	-38.86	1.005041	21.0	-0.212390D-02	0.923199D-03	156.51	0.000005
22.0	0.716476D+00	-0.700560D+00	-44.56	1.004116	22.0	-0.290641D-02	-0.798393D-03	-164.64	0.000009
23.0	0.641570D+00	-0.767951D+00	-50.12	1.001360	23.0	-0.296479D-02	-0.244730D-02	-180.46	0.000015
24.0	0.555479D+00	-0.830206D+00	-56.21	0.997798	24.0	-0.227338D-02	-0.356956D-02	-122.49	0.000018
25.0	0.458482D+00	-0.885839D+00	-62.84	0.994917	25.0	-0.102440D-02	-0.383863D-02	-105.08	0.000016
26.0	0.351378D+00	-0.933058D+00	-69.36	0.994063	26.0	0.374778D-03	-0.314778D-02	-83.21	0.000010
27.0	0.235426D+00	-0.969743D+00	-76.35	0.995826	27.0	0.150434D-02	-0.164650D-02	-47.58	0.000005
28.0	0.112244D+00	-0.993527D+00	-83.55	0.995994	28.0	0.196817D-02	0.291783D-03	8.43	0.000004
29.0	-0.162778D+00	-0.100195D+01	-90.53	1.004162	29.0	0.156248D-02	0.216501D-02	54.18	0.000007
30.0	-0.148064D+00	-0.992665D+00	-98.48	1.007306	30.0	0.337757D-03	0.347748D-02	84.45	0.000012
31.0	-0.280860D+00	-0.963713D+00	-106.25	1.007624	31.0	-0.140150D-02	0.387910D-02	109.86	0.000017
32.0	-0.412179D+00	-0.913716D+00	-114.28	1.008768	32.0	-0.317357D-02	0.326995D-02	134.14	0.000021
33.0	-0.539216D+00	-0.840610D+00	-122.63	0.999820	33.0	-0.445319D-02	0.183914D-02	157.56	0.000023
34.0	-0.658740D+00	-0.748985D+00	-131.33	0.994924	34.0	-0.482404D-02	0.234179D-04	179.72	0.000023
35.0	-0.767076D+00	-0.635574D+00	-140.36	0.992360	35.0	-0.410863D-02	-0.160704D-02	-158.64	0.000019
36.0	-0.860082D+00	-0.503706D+00	-149.64	0.993461	36.0	-0.243236D-02	-0.250711D-02	-134.13	0.000012
37.0	-0.933368D+00	-0.355954D+00	-155.12	0.997879	37.0	-0.201526D-03	-0.231681D-02	-94.97	0.000005
38.0	-0.982537D+00	-0.195509D+00	-168.75	1.003602	38.0	0.200375D-02	-0.977184D-03	-26.00	0.000005
39.0	-0.100356D+01	-0.261341D-01	-178.51	1.007821	39.0	0.359381D-02	0.123374D-02	18.95	0.000014
40.0	-0.993195D+00	0.147623D+00	171.53	1.008287	40.0	0.414522D-02	0.375987D-02	42.21	0.000031
41.0	-0.049337D+00	0.321382D+00	161.30	1.004528	41.0	0.353593D-02	0.590939D-02	59.11	0.000047
42.0	-0.071355D+00	0.488863D+00	155.70	0.998263	42.0	0.199703D-02	0.704432D-02	74.17	0.000054
43.0	-0.060232D+00	0.644005D+00	139.73	0.992694	43.0	0.608584D-04	0.676557D-02	89.48	0.000046
44.0	-0.618636D+00	0.779878D+00	128.42	0.990921	44.0	-0.158526D-02	0.503936D-02	107.46	0.000028
45.0	-0.450815D+00	0.889385D+00	116.88	0.994239	45.0	-0.230148D-02	0.222542D-02	135.96	0.000010

CIRCULAR PP POLARIZATION					CIRCULAR OP POLARIZATION					v = 30.000				
THETA	REAL	IMAG	PHASE	NRCS	THETA	REAL	IMAG	PHASE	NRCS	THETA	REAL	IMAG	PHASE	NRCS
45.0	-0.450815D+00	0.889385D+00	116.88	0.994239	45.0	-0.23048D-02	0.222342D-06	135.96	0.000010	46.2	-0.100694D-02	-149.31	0.000004	0.000004
46.0	-0.262541D+00	0.965593D+00	105.21	1.001245	46.2	-0.100694D-02	-0.100694D-02	-149.31	0.000004	47.0	0.230688D-03	-86.58	0.000015	0.000015
47.0	-0.004137D-01	0.100235D+01	93.45	1.008346	47.0	0.306162D-02	-0.356688D-02	-86.58	0.000015	48.0	0.306162D-02	-61.41	0.000041	0.000041
48.0	0.147347D+00	0.949144D+00	81.58	1.011565	48.0	0.604647D-02	-0.588203D-02	-44.21	0.000271	49.0	0.604647D-02	-29.43	0.000091	0.000091
49.0	0.352089D+00	0.906037D+00	69.48	1.008765	49.0	0.830208D-02	-0.468385D-02	-15.37	0.000088	50.0	0.830208D-02	-0.70	0.000063	0.000063
50.0	0.544429D+00	0.839440D+00	57.03	1.001062	50.0	0.906177D-02	-0.249152D-02	-0.70	0.000027	51.0	0.906177D-02	18.21	0.000004	0.000004
51.0	0.714600D+00	0.694154D+00	44.17	0.942503	51.0	0.491893D-02	0.194559D-02	70.80	0.000015	52.0	0.491893D-02	171.29	0.000063	0.000063
52.0	0.852815D+00	0.510587D+00	30.31	0.987992	52.0	0.753681D-02	-0.220037D-02	-163.93	0.000127	53.0	0.753681D-02	-149.80	0.000172	0.000172
53.0	0.949772D+00	0.297327D+00	17.38	0.990470	53.0	0.976426D-02	-0.875227D-02	-138.13	0.000167	54.0	0.976426D-02	-115.67	0.000040	0.000040
54.0	0.997348D+00	0.653112D-01	3.75	0.998984	54.0	0.102175D-02	0.102175D-02	85.01	0.000254	55.0	0.102175D-02	105.58	0.000312	0.000312
55.0	0.989420D+00	-0.172780D+00	-9.31	1.008805	55.0	0.162924D-02	0.158391D-01	95.87	0.000149	56.0	0.162924D-02	125.49	0.000527	0.000527
56.0	0.922750D+00	-0.403282D+00	-23.61	1.014071	56.0	0.436902D-02	-0.368488D-02	-70.86	0.000132	57.0	0.436902D-02	-44.16	0.000341	0.000341
57.0	0.797601D+00	-0.612106D+00	-37.50	1.011159	57.0	0.107223D-02	-0.107223D-02	-8.53	0.000359	58.0	0.107223D-02	1.33	0.000121	0.000121
58.0	0.619325D+00	-0.785921D+00	-51.76	1.001234	58.0	0.135947D-02	-0.782388D-03	-29.92	0.000002	59.0	0.135947D-02	84.27	0.000001	0.000001
59.0	0.396596D+00	-0.912521D+00	-66.51	1.018509	59.0	0.216759D-02	0.568348D-02	69.12	0.000138	60.0	0.216759D-02	-176.83	0.000134	0.000134
60.0	0.143166D+00	-0.981815D+00	-81.70	0.984457	60.0	0.459119D-02	-0.955178D-02	-115.67	0.000112	61.0	0.459119D-02	-167.33	0.000483	0.000483
61.0	-0.123881D+00	-0.986577D+00	-97.16	0.986681	61.0	0.116410D-02	-0.622306D-02	-100.60	0.000040	62.0	0.116410D-02	-159.92	0.000836	0.000836
62.0	-0.385147D+00	-0.923259D+00	-112.84	1.000745	62.0	0.135947D-02	-0.782388D-03	-29.92	0.000002	63.0	0.135947D-02	153.03	0.000941	0.000941
63.0	-0.620489D+00	-0.785921D+00	-128.05	1.013448	63.0	0.216759D-02	0.568348D-02	69.12	0.000138	64.0	0.216759D-02	-146.25	0.000698	0.000698
64.0	-0.810779D+00	-0.600958D+00	-143.45	1.018509	64.0	0.459119D-02	-0.955178D-02	-115.67	0.000112	65.0	0.459119D-02	-138.87	0.000272	0.000272
65.0	-0.933660D+00	-0.359175D+00	-159.08	1.011167	65.0	0.162924D-02	0.158391D-01	95.87	0.000254	66.0	0.162924D-02	-115.62	0.000006	0.000006
66.0	-0.995105D+00	-0.839133D+00	-175.18	0.997276	66.0	0.474355D-02	0.170099D-01	105.58	0.000312	67.0	0.474355D-02	46.53	0.000182	0.000182
67.0	-0.970655D+00	-0.203827D+00	168.34	0.983716	67.0	0.597574D-02	0.148795D-01	115.12	0.000270	68.0	0.597574D-02	54.21	0.000774	0.000774
68.0	-0.864197D+00	0.479937D+00	151.01	0.980637	68.0	0.708828D-02	0.994028D-02	125.49	0.000149	69.0	0.708828D-02	60.40	0.001409	0.001409
69.0	-0.682788D+00	0.719233D+00	133.74	0.991027	69.0	0.936902D-02	-0.368488D-02	-70.86	0.000132	70.0	0.936902D-02	-176.83	0.000272	0.000272
70.0	-0.449903D+00	0.979833D+00	116.61	1.008786	70.0	0.107223D-02	-0.107223D-02	-8.53	0.000359	71.0	0.107223D-02	-167.33	0.000483	0.000483
71.0	-0.169854D+00	0.996613D+00	99.67	1.022089	71.0	0.822902D-02	-0.799102D-02	-44.16	0.000132	72.0	0.822902D-02	-159.92	0.000836	0.000836
72.0	0.128469D+00	0.100233D+01	82.70	1.021162	72.0	0.105800D-01	-0.105268D-01	-33.61	0.000341	73.0	0.105800D-01	1.33	0.000121	0.000121
73.0	0.418666D+00	0.911145D+00	65.32	1.005467	73.0	0.205501D-01	-0.955283D-02	-24.93	0.000514	74.0	0.205501D-01	84.27	0.000001	0.000001
74.0	0.673382D+00	0.729092D+00	47.27	0.985018	74.0	0.219793D-01	-0.662614D-02	-16.78	0.000527	75.0	0.219793D-01	-176.83	0.000134	0.000134
75.0	0.866719D+00	0.472228D+00	28.58	0.974201	75.0	0.187276D-01	-0.280975D-02	-8.53	0.000359	76.0	0.187276D-01	-167.33	0.000483	0.000483
76.0	0.976900D+00	0.165451D+00	9.61	0.981707	76.0	0.109820D-01	0.254346D-03	1.33	0.000121	77.0	0.109820D-01	-159.92	0.000836	0.000836
77.0	0.988939D+00	-0.159859D+00	-9.18	1.004554	77.0	0.118965D-03	0.118400D-02	84.27	0.000001	78.0	0.118965D-03	153.03	0.000941	0.000941
78.0	0.897047D+00	-0.469116D+00	-27.61	1.024762	78.0	0.115722D-01	-0.641292D-03	-176.83	0.000134	79.0	0.115722D-01	-146.25	0.000698	0.000698
79.0	0.706364D+00	-0.728348D+00	-45.88	1.029435	79.0	0.214395D-01	-0.481814D-02	-167.33	0.000483	80.0	0.214395D-01	-138.87	0.000272	0.000272
80.0	0.433635D+00	-0.908011D+00	-64.47	1.012651	80.0	-0.271535D-01	-0.992716D-02	-159.92	0.000836	81.0	-0.271535D-01	-115.62	0.000006	0.000006
81.0	0.106500D+00	-0.968999D+00	-83.84	0.985312	81.0	-0.273322D-01	-0.139101D-01	-153.03	0.000941	82.0	-0.273322D-01	-46.53	0.000182	0.000182
82.0	-0.238793D+00	-0.934144D+00	-104.05	0.967612	82.0	-0.219793D-01	-0.146410D-01	-146.25	0.000698	83.0	-0.219793D-01	54.21	0.000774	0.000774
83.0	-0.561185D+00	-0.811555D+00	-124.66	0.973551	83.0	-0.124173D-01	-0.108431D-01	-138.87	0.000272	84.0	-0.124173D-01	60.40	0.001409	0.001409
84.0	-0.819795D+00	-0.572570D+00	-145.02	1.001045	84.0	-0.107012D-02	-0.223148D-02	-115.62	0.000006	85.0	-0.107012D-02	-115.62	0.000006	0.000006
85.0	-0.979489D+00	-0.266229D+00	-164.79	1.030277	85.0	0.928807D-02	0.979830D-02	46.53	0.000182	86.0	0.928807D-02	54.21	0.000774	0.000774
86.0	-0.101624D+01	0.752656D+00	175.76	1.038416	86.0	0.162678D-01	0.225615D-01	54.21	0.000774	87.0	0.162678D-01	60.40	0.001409	0.001409
87.0	-0.921394D+00	0.410179D+00	156.00	1.017214	87.0	0.185419D-01	0.326390D-01	60.40	0.001409	88.0	0.185419D-01	-176.83	0.000272	0.000272
88.0	-0.703964D+00	0.967760D+00	135.29	0.981062	88.0	0.162094D-01	0.367990D-01	-138.87	0.000272	89.0	0.162094D-01	-115.62	0.000006	0.000006
89.0	-0.390512D+00	0.897346D+00	113.52	0.957730	89.0	0.107322D-01	0.329067D-01	-115.62	0.000006	90.0	0.107322D-01	71.94	0.001198	0.001198
90.0	-0.222682D-01	0.983228D+00	91.30	0.967234	90.0	0.444556D-02	0.207189D-01	77.89	0.000449					

CIRCULAR PP POLARIZATION KA= 30.000

THETA	REAL	IMAG	PHASE	NRCS	THETA	REAL	IMAG	PHASE	NRCS
90.0	-0.222662D+00	0.983228D+00	91.30	0.967236	90.0	0.444556D-02	0.207189D-01	77.89	0.000459
91.0	0.350183D+00	0.939292D+00	69.55	1.004728	91.0	-0.219879D-03	0.215614D-02	95.82	0.000005
92.0	0.673992D+00	0.766607D+00	48.68	1.041951	92.0	-0.157256D-02	-0.189742D-01	-94.74	0.000362
93.0	0.901881D+00	0.484568D+00	28.25	1.048195	93.0	0.716040D-03	-0.378101D-01	-88.92	0.001430
94.0	0.999492D+00	0.128832D+00	7.34	1.015582	94.0	0.541623D-02	-0.496297D-01	-83.77	0.002492
95.0	0.951051D+00	-0.251971D+00	-18.34	0.967987	95.0	0.100717D-01	-0.511053D-01	-78.85	0.002713
96.0	0.762350D+00	-0.024623D+00	-38.32	0.944162	96.0	0.117944D-01	-0.412705D-01	-74.05	0.001842
97.0	0.460483D+00	-0.466846D+00	-62.07	0.966416	97.0	0.830401D-02	-0.219146D-01	-69.25	0.000549
98.0	0.902391D+00	-0.100587D+00	-84.87	1.019921	98.0	-0.110758D-02	0.274007D-02	112.01	0.000009
99.0	-0.292358D+00	-0.988016D+00	-106.48	1.061648	99.0	-0.150169D-01	0.270275D-01	119.06	0.000956
100.0	-0.628456D+00	-0.812202D+00	-127.73	1.054629	100.0	-0.299509D-01	0.452554D-01	123.50	0.002945
101.0	-0.865457D+00	-0.501641D+00	-149.90	1.000660	101.0	-0.411593D-01	0.531758D-01	127.75	0.004523
102.0	-0.965899D+00	-0.103883D+00	-173.86	0.942685	102.0	-0.439339D-01	0.491060D-01	131.86	0.004347
103.0	-0.971123D+00	0.317704D+00	160.78	0.931278	103.0	-0.353366D-01	0.34749D-01	135.79	0.002430
104.0	-0.710170D+00	0.690233D+00	135.82	0.980762	104.0	-0.149753D-01	0.129551D-01	139.14	0.000392
105.0	-0.393144D+00	0.947751D+00	112.53	1.052794	105.0	0.138528D-01	-0.963414D-02	-34.82	0.000285
106.0	-0.106176D+00	0.104169D+00	90.58	1.085237	106.0	0.448175D-01	-0.278522D-01	-31.86	0.002784
107.0	0.374955D+00	0.951280D+00	68.49	1.045525	107.0	0.698436D-01	-0.376556D-01	-28.33	0.006296
108.0	0.698933D+00	0.688860D+00	44.59	0.943071	108.0	0.811707D-01	-0.375670D-01	-24.84	0.008000
109.0	0.905151D+00	0.299340D+00	18.30	0.968903	109.0	0.736119D-01	-0.289721D-01	-21.48	0.006258
110.0	0.955522D+00	-0.147159D+00	-8.75	0.935118	110.0	0.463793D-01	-0.155506D-01	-18.54	0.002393
111.0	0.838516D+00	-0.567524D+00	-34.79	1.025194	111.0	0.389805D-02	-0.200837D-02	-27.26	0.000019
112.0	0.570255D+00	-0.881490D+00	-57.10	1.102216	112.0	-0.447447D-01	0.749661D-02	170.49	0.002058
113.0	0.193549D+00	-0.102751D+00	-79.24	1.093972	113.0	-0.877148D-01	0.107471D-01	173.02	0.007809
114.0	-0.206930D+00	-0.975604D+00	-102.75	1.000508	114.0	-0.113323D+00	0.811265D-02	175.91	0.012908
115.0	-0.602063D+00	-0.734309D+00	-129.35	0.901688	115.0	-0.113188D+00	0.249743D-02	178.74	0.012818
116.0	-0.876105D+00	-0.350032D+00	-158.22	0.890082	116.0	-0.848230D-01	-0.191088D-02	-178.71	0.007199
117.0	-0.987287D+00	0.101428D+00	174.13	0.985024	117.0	-0.328758D-01	-0.123622D-02	-177.85	0.001082
118.0	-0.970444D+00	0.529722D+00	14.77	1.106778	118.0	0.314477D-01	0.638106D-02	11.47	0.001030
119.0	-0.150266D+00	0.848248D+00	127.47	1.142371	119.0	0.927738D-01	0.196806D-01	11.98	0.008994
120.0	-0.256754D+00	0.992149D+00	104.51	1.050283	120.0	0.135274D+00	0.342307D-01	14.20	0.019471
121.0	0.196747D+00	0.932166D+00	73.08	0.907644	121.0	0.146798D+00	0.435854D-01	16.54	0.023449
122.0	0.619550D+00	0.681241D+00	47.72	0.847931	122.0	0.122342D+00	0.414068D-01	18.70	0.016682
123.0	0.923026D+00	0.292733D+00	17.57	0.937400	123.0	0.658649D-01	0.239495D-01	19.98	0.004912
124.0	0.103944D+00	-0.152701D+00	-8.36	1.103753	124.0	-0.101527D-01	-0.791033D-02	-142.08	0.000166
125.0	0.937713D+00	-0.559740D+00	-30.83	1.192615	125.0	-0.874432D-01	-0.478780D-01	-151.30	0.009939
126.0	0.632350D+00	-0.843023D+00	-53.13	1.110554	126.0	-0.146389D+00	-0.851647D-01	-149.81	0.028683
127.0	0.182946D+00	-0.943191D+00	-79.02	0.923119	127.0	-0.171081D+00	-0.107122D+00	-147.95	0.040744
128.0	-0.316424D+00	-0.840853D+00	-116.62	0.807157	128.0	-0.153673D+00	-0.103019D+00	-146.16	0.034228
129.0	-0.756364D+00	-0.559657D+00	-143.50	0.865301	129.0	-0.968379D-01	-0.679226D-01	-144.95	0.013991
130.0	-0.403610D+00	-0.162354D+00	-171.09	1.099455	130.0	-0.135578D-01	-0.546216D-02	-158.06	0.000214
131.0	-0.108705D+00	0.263552D+00	166.37	1.251130	131.0	0.758216D-01	0.716014D-01	43.36	0.010876
132.0	-0.690362D+00	0.624915D+00	144.94	1.183264	132.0	0.148612D+00	0.143551D+00	44.01	0.042692
133.0	-0.448393D+00	0.843453D+00	119.85	0.945610	133.0	0.185633D+00	0.188420D+00	45.43	0.069962
134.0	0.436636D+00	0.872727D+00	87.14	0.733986	134.0	0.176363D+00	0.182200D+00	46.86	0.066523
135.0	0.571744D+00	0.709432D+00	51.13	0.830185	135.0	0.121977D+00	0.139490D+00	47.38	0.033079

CIRCULAR OP POLARIZATION KA= 30.000

THETA	REAL	IMAG	PHASE	NRCS	THETA	REAL	IMAG	PHASE	NRCS
90.0	0.444556D-02	0.207189D-01	77.89	0.000459	90.0	0.444556D-02	0.207189D-01	77.89	0.000459
91.0	-0.219879D-03	0.215614D-02	95.82	0.000005	91.0	-0.219879D-03	0.215614D-02	95.82	0.000005
92.0	-0.157256D-02	-0.189742D-01	-94.74	0.000362	92.0	-0.157256D-02	-0.189742D-01	-94.74	0.000362
93.0	0.716040D-03	-0.378101D-01	-88.92	0.001430	93.0	0.716040D-03	-0.378101D-01	-88.92	0.001430
94.0	0.541623D-02	-0.496297D-01	-83.77	0.002492	94.0	0.541623D-02	-0.496297D-01	-83.77	0.002492
95.0	0.100717D-01	-0.511053D-01	-78.85	0.002713	95.0	0.100717D-01	-0.511053D-01	-78.85	0.002713
96.0	0.117944D-01	-0.412705D-01	-74.05	0.001842	96.0	0.117944D-01	-0.412705D-01	-74.05	0.001842
97.0	0.830401D-02	-0.219146D-01	-69.25	0.000549	97.0	0.830401D-02	-0.219146D-01	-69.25	0.000549
98.0	-0.110758D-02	0.274007D-02	112.01	0.000009	98.0	-0.110758D-02	0.274007D-02	112.01	0.000009
99.0	-0.150169D-01	0.270275D-01	119.06	0.000956	99.0	-0.150169D-01	0.270275D-01	119.06	0.000956
100.0	-0.299509D-01	0.452554D-01	123.50	0.002945	100.0	-0.299509D-01	0.452554D-01	123.50	0.002945
101.0	-0.411593D-01	0.531758D-01	127.75	0.004523	101.0	-0.411593D-01	0.531758D-01	127.75	0.004523
102.0	-0.439339D-01	0.491060D-01	131.86	0.004347	102.0	-0.439339D-01	0.491060D-01	131.86	0.004347
103.0	-0.353366D-01	0.34749D-01	135.79	0.002430	103.0	-0.353366D-01	0.34749D-01	135.79	0.002430
104.0	-0.149753D-01	0.129551D-01	139.14	0.000392	104.0	-0.149753D-01	0.129551D-01	139.14	0.000392
105.0	0.138528D-01	-0.963414D-02	-34.82	0.000285	105.0	0.138528D-01	-0.963414D-02	-34.82	0.000285
106.0	0.448175D-01	-0.278522D-01	-31.86	0.002784	106.0	0.448175D-01	-0.278522D-01	-31.86	0.002784
107.0	0.698436D-01	-0.376556D-01	-28.33	0.006296	107.0	0.698436D-01	-0.376556D-01	-28.33	0.006296
108.0	0.811707D-01	-0.375670D-01	-24.84	0.008000	108.0	0.811707D-01	-0.375670D-01	-24.84	0.008000
109.0	0.736119D-01	-0.289721D-01	-21.48	0.006258	109.0	0.736119D-01	-0.289721D-01	-21.48	0.006258
110.0	0.463793D-01	-0.155506D-01	-18.54	0.002393	110.0	0.463793D-01	-0.155506D-01	-18.54	0.002393
111.0	0.389805D-02	-0.200837D-02	-27.26	0.000019	111.0	0.389805D-02	-0.200837D-02	-27.26	0.000019
112.0	-0.447447D-01	0.749661D-02	170.49	0.002058	112.0	-0.447447D-01	0.749661D-02	170.49	0.002058
113.0	-0.877148D-01	0.107471D-01	173.02	0.007809	113.0	-0.877148D-01	0.107471D-01	173.02	0.007809
114.0	-0.113323D+00	0.811265D-02	175.91	0.012908	114.0	-0.113323D+00	0.811265D-02	175.91	0.012908
115.0	-0.113188D+00	0.249743D-02	178.74	0.012818	115.0	-0.113188D+00	0.249743D-02	178.74	0.012818
116.0	-0.848230D-01	-0.191088D-02	-178.71	0.007199	116.0	-0.848230D-01	-0.191088D-02	-178.71	0.007199
117.0	-0.328758D-01	-0.123622D-02	-177.85	0.001082	117.0	-0.328758D-01	-0.123622D-02	-177.85	0.001082
118.0	0.314477D-01	0.638106D-02	11.47	0.001030	118.0	0.314477D-01	0.638106D-02	11.47	0.001030
119.0	0.927738D-01	0.196806D-01	11.98	0.008994	119.0	0.927738D-01	0.196806D-01	11.98	0.008994
120.0	0.135274D+00	0.342307D-01	14.20	0.019471	120.0	0.135274D+00	0.342307D-01	14.20	0.019471
121.0	0.146798D+00	0.435854D-01	16.54	0.023449	121.0	0.146798D+00	0.435854D-01	16.54	0.023449
122.0	0.122342D+00	0.414068D-01	18.70	0.016682	122.0	0.122342D+00	0.414068D-01	18.70	0.016682
123.0	0.658649D-01	0.239495D-01	19.98	0.004912	123.0	0.658649D-01	0.239495D-01	19.98	0.004912
124.0	-0.101527D-01	-0.791033D-02	-142.08	0.000166	124.0	-0.101527D-01	-0.791033D-02	-142.08	0.000166
125.0	-0.874432D-01	-0.478780D-01	-151.30	0.009939	125.0	-0.874432D-01	-0.478780D-01	-151.30	0.009939
126.0	-0.146389D+00	-0.851647D-01	-149.81	0.028683	126.0	-0.146389D+00	-0.851647D-01	-149.81	0.028683
127.0	-0.171081D+00	-0.107122D+00	-147.95	0.040744	127.0	-0.171081D+00	-0.107122D+00	-147.95	0.040744
128.0	-0.153673D+00	-0.103019D+00	-146.16	0.034228	128.0	-0.153673D+00	-0.103019D+00	-146.16	0.034228
129.0	-0.968379D-01	-0.679226D-01	-144.95	0.013991	129.0	-0.968379D-01	-0.679226D-01	-144.95	0.013991

CIRCULAR EP POLARIZATION KA= 30.000					CIRCULAR OF POLARIZATION KA= 30.000				
THETA	REAL	IMAG	PHASE	MRCS	THETA	REAL	IMAG	PHASE	MRCS
135.0	0.571744D+00	0.19432D+00	51.13	0.830185	135.0	0.121977D+00	0.133909D+00	47.68	0.033079
136.0	0.974637D+00	0.391616D+00	21.89	1.102671	136.0	0.354055D+01	0.346697D+01	44.40	0.002456
137.0	0.15278D+01	-0.778734D+02	-0.39	1.326254	137.0	-0.617354D+01	-0.917439D+01	-123.94	0.012228
138.0	0.105623D+01	-0.398646D+00	-20.68	1.274533	138.0	-0.144591D+00	-0.212592D+00	-124.22	0.066102
139.0	0.701054D+00	-0.693689D+00	-44.70	0.972682	139.0	-0.191525D+00	-0.292649D+00	-123.20	0.122325
140.0	0.167270D+00	-0.828062D+00	-78.56	0.713666	140.0	-0.189877D+00	-0.302851D+00	-122.09	0.127772
141.0	-0.418105D+00	-0.773714D+00	-118.39	0.773445	141.0	-0.139464D+00	-0.229625D+00	-121.27	0.072178
142.0	-0.910839D+00	-0.565391D+00	-149.39	1.127070	142.0	-0.528372D+01	-0.811303D+01	-123.07	0.009374
143.0	-0.118506D+01	-0.196933D+00	-170.56	1.443150	143.0	0.478414D+01	0.111823D+00	66.84	0.044793
144.0	-0.116591D+01	0.191287D+00	170.68	1.395927	144.0	0.136527D+00	0.301224D+00	65.62	0.109375
145.0	-0.850592D+00	0.530595D+00	148.04	1.005037	145.0	0.190126D+00	0.433015D+00	66.29	0.223650
146.0	-0.317889D+00	0.744533D+00	112.73	0.651603	146.0	0.194627D+00	0.461579D+00	67.14	0.250935
147.0	0.317659D+00	0.785704D+00	67.99	0.718237	147.0	0.148850D+00	0.363908D+00	67.75	0.154584
148.0	0.877610D+00	0.646446D+00	36.37	1.188443	148.0	-0.484111D+01	-0.149379D+00	66.55	0.026515
149.0	0.122125D+01	0.360187D+00	16.43	1.621195	149.0	-0.354402D+01	-0.138189D+00	-104.38	0.020352
150.0	0.25257D+01	-0.648327D+00	-0.30	1.568973	150.0	-0.125672D+00	-0.427947D+00	-106.37	0.198932
151.0	0.955167D+00	-0.369171D+00	-71.13	1.046630	151.0	-0.182434D+00	-0.638040D+00	-105.96	0.440377
152.0	0.398521D+00	-0.544938D+00	-58.29	0.574764	152.0	-0.191266D+00	-0.697042D+00	-105.34	0.522451
153.0	-0.277080D+00	-0.771076D+00	-109.77	0.671332	153.0	-0.150466D+00	-0.565571D+00	-104.90	0.342511
154.0	-0.895218D+00	-0.719161D+00	-131.22	1.318608	154.0	-0.718158D+01	-0.252106D+00	-105.82	0.068657
155.0	-0.128901D+01	-0.501288D+00	-158.75	1.912845	155.0	-0.246040D+01	-0.182167D+00	82.31	0.033790
156.0	-0.134604D+01	-0.167158D+00	-172.92	1.839760	156.0	0.112217D+00	0.632390D+00	79.94	0.412510
157.0	-0.104039D+01	0.207286D+00	168.73	1.125366	157.0	0.168767D+00	0.972498D+00	80.15	0.974234
158.0	-0.442808D+00	0.536773D+00	129.52	0.464204	158.0	0.180291D+00	0.108693D+01	80.58	1.213915
159.0	0.294810D+00	0.786159D+00	68.44	0.643666	159.0	0.145027D+00	0.904802D+00	80.89	0.838975
160.0	0.577248D+00	0.786773D+00	39.84	1.574026	160.0	0.735697D+01	0.425016D+00	80.18	0.186051
161.0	0.141691D+01	0.647400D+00	24.56	2.426770	161.0	-0.143155D+01	-0.267588D+00	-93.06	0.071608
162.0	0.148459D+01	0.356749D+00	13.51	2.331267	162.0	-0.952473D+01	-0.101444D+01	-95.36	1.038157
163.0	0.114635D+01	-0.227639D+01	-1.14	1.314627	163.0	-0.148582D+00	-0.161084D+01	-95.27	2.616889
164.0	0.476247D+00	-0.408511D+00	-40.62	0.393692	164.0	-0.161793D+00	-0.185314D+01	-94.90	3.460291
165.0	-0.359438D+01	-0.715408D+00	-116.68	0.641004	165.0	-0.133439D+00	-0.155344D+01	-94.79	2.556872
166.0	-0.114306D+01	-0.874063D+00	-142.60	2.070562	166.0	-0.729992D+01	-0.790176D+00	-95.28	0.629707
167.0	-0.166127D+01	-0.945411D+00	-153.03	3.474524	167.0	0.225469D+02	6.458565D+00	89.72	0.210287
168.0	-0.176104D+01	-0.628768D+00	-160.35	3.496619	168.0	0.723181D+01	6.193898D+01	87.83	3.649444
169.0	-0.139102D+01	-0.261670D+00	-169.25	2.003409	169.0	0.119973D+00	0.313817D+01	87.85	10.242667
170.0	-0.616804D+00	0.188321D+00	163.02	0.415912	170.0	0.135156D+00	0.390147D+01	88.02	15.239747
171.0	0.394334D+00	0.638025D+00	58.28	0.562575	171.0	0.117038D+00	0.361177D+01	88.14	13.058550
172.0	0.141578D+01	0.100610D+01	35.40	3.016659	172.0	0.734528+01	0.205689D+01	87.93	4.109596
173.0	0.221934D+01	0.122784D+01	28.99	6.440631	173.0	0.173198D+01	-0.979353D+00	-88.99	3.959432
174.0	0.263724D+01	0.127782D+01	25.85	8.58876	174.0	-0.366258D+01	-0.529847D+01	-90.40	28.075084
175.0	0.259992D+01	0.115574D+01	23.97	8.095308	175.0	-0.771735D+01	-0.105883D+02	-90.42	112.117975
176.0	0.215872D+01	0.904368D+00	22.73	5.477968	176.0	-0.989893D+01	-0.163036D+02	-90.35	265.817950
177.0	0.140797D+01	0.590180D+00	21.90	2.503262	177.0	-0.103449D+02	-0.217734D+02	-90.27	474.089732
178.0	0.742640D+00	0.230601D+00	21.37	6.636261	178.0	-0.970763D+01	-0.263048D+02	-90.21	691.949674
179.0	0.200336D+00	0.771527D+01	21.06	0.046087	179.0	-0.884869D+01	-0.292349D+02	-90.17	858.319086
180.0	0.801975D+10	-0.250624D+09	-72.26	0.000000	180.0	-0.847233D+01	-0.303624D+02	-90.16	920.668541

CIRCULAR PP POLARIZATION KA= 35.000

CIRCULAR OP POLARIZATION KA= 35.000

THETA	REAL	IMAG	PHASE	MRC	THETA	REAL	IMAG	PHASE	MRC
0.0	-0.627157D+00	-0.789317D+00	-128.47	1.016347	0.0	-0.568981D-10	0.463809D-10	140.81	0.000000
1.0	-0.626687D+00	-0.787091D+00	-128.62	1.017759	1.0	-0.275154D-03	-0.280199D-03	-134.48	0.000000
2.0	-0.633434D+00	-0.780524D+00	-129.06	1.010456	2.0	-0.980712D-03	-0.102438D-02	-133.75	0.000002
3.0	-0.641794D+00	-0.769914D+00	-129.81	1.004666	3.0	-0.180477D-02	-0.197307D-02	-132.45	0.000007
4.0	-0.654237D+00	-0.755638D+00	-130.89	0.999018	4.0	-0.236846D-02	-0.278451D-02	-130.38	0.000013
5.0	-0.671087D+00	-0.738004D+00	-132.28	0.995008	5.0	-0.237933D-02	-0.314283D-02	-127.13	0.000016
6.0	-0.692331D+00	-0.711718D+00	-133.99	0.993593	6.0	-0.175300D-02	-0.286066D-02	-121.50	0.000011
7.0	-0.717574D+00	-0.692784D+00	-136.01	0.994862	7.0	-0.654739D-03	-0.194499D-02	-108.60	0.000004
8.0	-0.745988D+00	-0.664487D+00	-138.31	0.998036	8.0	0.556668D-03	-0.684070D-03	-47.34	0.000001
9.0	-0.776530D+00	-0.631456D+00	-140.88	1.001735	9.0	0.146266D-02	0.809354D-03	28.96	0.000003
10.0	-0.808125D+00	-0.592801D+00	-143.74	1.004479	10.0	0.174548D-02	0.190369D-02	47.48	0.000007
11.0	-0.839806D+00	-0.547686D+00	-146.89	1.005234	11.0	0.131362D-02	0.237171D-02	61.02	0.000007
12.0	-0.870806D+00	-0.495488D+00	-150.36	1.003011	12.0	0.342486D-03	0.209278D-02	80.71	0.000004
13.0	-0.900516D+00	-0.435904D+00	-154.17	1.000942	13.0	-0.787379D-03	-0.117914D-02	123.73	0.000002
14.0	-0.928311D+00	-0.368974D+00	-158.32	0.997959	14.0	-0.163281D-02	-0.519655D-04	-178.18	0.000003
15.0	-0.953585D+00	-0.295021D+00	-162.81	0.996453	15.0	-0.185773D-02	-0.117560D-02	-147.67	0.000005
16.0	-0.974089D+00	-0.214536D+00	-167.59	0.994453	16.0	-0.136468D-02	-0.179710D-02	-127.21	0.000005
17.0	-0.991099D+00	-0.128457D+00	-172.64	0.994897	17.0	-0.336237D-03	-0.168629D-02	-101.28	0.000003
18.0	-0.999987D+00	-0.060883D-01	-177.53	1.001277	18.0	0.832123D-03	-0.861442D-03	-45.99	0.000001
19.0	-0.999825D+00	0.668926D-01	176.5	1.003358	19.0	0.168405D-02	0.449887D-03	13.65	0.000003
20.0	-0.988586D+00	0.162329D+00	170.6	1.003054	20.0	0.188203D-02	0.169142D-02	41.95	0.000006
21.0	-0.964624D+00	0.267412D+00	164.51	1.002009	21.0	0.134495D-02	0.253594D-02	62.06	0.000008
22.0	-0.926719D+00	0.374879D+00	157.96	0.999329	22.0	0.288290D-03	0.263588D-02	83.76	0.000007
23.0	-0.874058D+00	0.447465D+00	151.08	0.997135	23.0	-0.852123D-03	0.194245D-02	113.69	0.000004
24.0	-0.806233D+00	0.565845D+00	143.86	0.996751	24.0	-0.158644D-02	0.695544D-03	156.33	0.000003
25.0	-0.723054D+00	0.687199D+00	136.35	0.998519	25.0	-0.156479D-02	-0.656977D-03	-157.22	0.000003
26.0	-0.624588D+00	0.781992D+00	128.61	1.001522	26.0	-0.722218D-03	-0.161568D-02	-114.11	0.000003
27.0	-0.510789D+00	0.862039D+00	120.65	1.004017	27.0	0.678141D-03	-0.181496D-02	-69.51	0.000004
28.0	-0.382453D+00	0.926356D+00	112.43	1.004410	28.0	0.214403D-02	-0.116800D-02	-28.58	0.000006
29.0	-0.240682D+00	0.971756D+00	103.91	1.002239	29.0	0.213026D-02	0.859448D-04	1.57	0.000010
30.0	-0.875700D-01	0.995445D+00	95.03	0.998579	30.0	0.325733D-02	0.145515D-02	24.07	0.000013
31.0	0.736684D+00	0.995046D+00	85.77	0.995543	31.0	0.246789D-02	0.236932D-02	43.83	0.000012
32.0	0.538635D+00	0.968569D+00	76.16	0.995072	32.0	0.106266D-02	0.239356D-02	66.06	0.000007
33.0	0.401885D+00	0.914431D+00	66.27	0.997695	33.0	-0.405041D-03	0.140319D-02	106.10	0.000002
34.0	0.557230D+00	0.831565D+00	56.17	1.002039	34.0	-0.134131D-02	-0.350015D-03	-165.37	0.000002
35.0	0.698151D+00	0.719786D+00	45.87	1.005510	35.0	-0.135071D-02	-0.231193D-02	-120.29	0.000007
36.0	0.855415D+00	0.579977D+00	35.34	1.005849	36.0	-0.408352D-03	-0.382088D-02	-96.10	0.000015
37.0	0.911425D+00	0.414663D+00	24.46	1.002645	37.0	0.107380D-02	-0.435302D-02	-75.73	0.000020
38.0	0.972459D+00	0.226279D+00	13.21	0.997787	38.0	0.254255D-02	-0.373193D-02	-55.73	0.000020
39.0	0.967230D+00	0.272359D-01	1.57	0.994416	39.0	-0.321397D-02	-0.220939D-02	-34.51	0.000015
40.0	0.981042D+00	-0.180167D+00	-10.41	0.994904	40.0	0.268268D-02	-0.387414D-03	-8.22	0.000007
41.0	0.922791D+00	-0.384194D+00	-22.60	0.995147	41.0	0.947425D-03	0.100344D-02	46.64	0.000002
42.0	0.821338D+00	-0.574291D+00	-34.96	1.004405	42.0	-0.152370D-02	0.138937D-02	137.64	0.000004
43.0	0.677981D+00	-0.739815D+00	-47.50	1.006985	43.0	-0.344643D-02	0.594182D-03	171.44	0.000016
44.0	0.566581D+00	-0.870751D+00	-60.30	1.004799	44.0	-0.550512D-02	-0.106255D-02	-169.02	0.000031
45.0	0.283976D+00	-0.958333D+00	-73.49	0.999044	45.0	-0.566890D-02	-0.285861D-02	-153.24	0.000040

CIRCULAR PP POLARIZATION KA= 35.000

CIRCULAR OP POLARIZATION KA= 35.000

THETA	REAL	IMAG	PHASE	NRCS	THETA	REAL	IMAG	PHASE	NRCS
45.0	0.283976D+00	-0.958333D+00	-73.49	0.999044	45.0	-0.566890D-02	-0.285861D-02	-153.24	0.000040
46.0	0.501423D-01	-0.995563D+00	-87.12	0.993659	46.0	-0.440964D-02	-0.392974D-02	-138.29	0.000035
47.0	-0.192057D+00	-0.977647D+00	-101.11	0.992683	47.0	-0.223261D-02	-0.360681D-02	-121.76	0.000018
48.0	-0.427623D+00	-0.902428D+00	-115.35	0.997237	48.0	0.445038D-05	-0.170139D-02	-99.85	0.000003
49.0	-0.640429D+00	-0.770856D+00	-129.72	1.008369	49.0	0.142350D-02	0.137640D-02	44.04	0.000004
50.0	-0.814701D+00	-0.587491D+00	-144.20	1.008884	50.0	0.148514D-02	0.472587D-02	72.55	0.000025
51.0	-0.936402D+00	-0.360934D+00	-158.92	1.007122	51.0	0.230908D-03	0.726227D-02	86.18	0.000053
52.0	-0.994561D+00	-0.104035D+00	-174.03	0.999974	52.0	-0.169696D-02	0.811795D-02	101.81	0.000069
53.0	-0.982329D+00	0.166343D+00	170.39	0.992641	53.0	-0.328169D-02	0.697666D-02	115.19	0.000059
54.0	-0.897725D+00	0.430150D+00	154.40	0.990940	54.0	-0.353045D-02	0.422200D-02	129.90	0.000030
55.0	-0.744060D+00	0.665627D+00	138.14	0.996685	55.0	-0.189671D-02	0.814599D-03	156.76	0.000004
56.0	-0.530097D+00	0.851354D+00	121.91	1.005806	56.0	0.144205D-02	-0.206286D-02	-55.04	0.000006
57.0	-0.269950D+00	0.968611D+00	105.57	1.011080	57.0	0.557416D-02	-0.366252D-02	-31.85	0.000043
58.0	0.173822D-01	0.100374D+01	89.01	1.007792	58.0	0.913609D-02	-0.305918D-02	-18.51	0.000022
59.0	0.308631D+00	0.950102D+00	72.00	0.997947	59.0	0.107974D-01	-0.130432D-02	-6.89	0.000118
60.0	0.578113D+00	0.809358D+00	54.46	0.989275	60.0	0.977148D-02	0.730275D-03	4.27	0.000096
61.0	0.799361D+00	0.591831D+00	36.52	0.989282	61.0	0.615282D-02	0.177789D-02	16.12	0.000041
62.0	0.948038D+00	0.315952D+00	18.45	0.998602	62.0	0.936713D-03	0.917373D-03	44.40	0.000002
63.0	0.100498D+01	0.684248D-02	0.39	1.015041	63.0	-0.430613D-02	-0.198322D-02	-155.27	0.000022
64.0	0.959287D+00	-0.305796D+00	-17.68	1.013742	64.0	0.799236D-02	-0.610999D-02	-142.60	0.000101
65.0	0.813763D+00	-0.590303D+00	-36.06	1.005794	65.0	-0.911764D-02	-0.492318D-02	-132.58	0.000182
66.0	0.571311D+00	-0.816028D+00	-55.00	0.992399	66.0	-0.764375D-02	-0.116992D-01	-123.16	0.000195
67.0	0.264661D+00	-0.956490D+00	-74.53	0.944923	67.0	-0.451594D-02	-0.102044D-01	-113.97	0.000125
68.0	-0.756513D-01	-0.992560D+00	-54.36	0.990899	68.0	-0.128370D-02	-0.525741D-02	-103.72	0.000029
69.0	-0.409947D+00	-0.915359D+00	-114.13	1.009939	69.0	0.542774D-03	0.209256D-02	75.46	0.000005
70.0	-0.697270D+00	-0.728559D+00	-133.74	1.016984	70.0	0.151378D-03	0.960781D-02	89.12	0.000096
71.0	-0.900755D+00	-0.449528D+00	-153.48	1.013435	71.0	-0.217078D-02	0.155309D-01	97.96	0.000246
72.0	-0.992725D+00	-0.108859D+00	-173.74	0.997354	72.0	-0.508149D-02	0.174117D-01	106.27	0.000329
73.0	-0.958789D+00	0.252117D+00	165.21	0.982839	73.0	-0.669186D-02	0.747940D-01	114.33	0.000264
74.0	-0.800349D+00	0.585908D+00	143.79	0.983848	74.0	-0.536787D-02	0.851432D-02	122.23	0.000101
75.0	-0.535191D+00	0.945186D+00	122.34	1.000768	75.0	-0.517856D-03	0.598075D-03	130.85	0.000001
76.0	-0.196005D+00	0.990053D+00	101.20	1.018623	76.0	0.696455D-02	-0.642891D-02	-42.71	0.000090
77.0	0.173052D+00	0.995052D+00	80.13	1.020076	77.0	0.148231D-01	-0.104980D-01	-35.31	0.000330
78.0	0.521517D+00	0.854553D+00	58.61	1.002240	78.0	0.201402D-01	-0.107615D-01	-28.12	0.000521
79.0	0.799064D+00	0.585279D+00	36.22	0.981055	79.0	0.203989D-01	-0.789775D-02	-21.17	0.000478
80.0	0.962625D+00	0.225164D+00	13.77	0.977347	80.0	0.145145D-01	-0.379544D-02	-14.65	0.000225
81.0	0.983333D+00	-0.171603D+00	-5.90	0.996391	81.0	0.344462D-02	-0.725073D-03	-11.89	0.000012
82.0	0.852272D+00	-0.542743D+00	-32.49	1.020936	82.0	-0.992956D-02	-0.316170D-03	-178.18	0.000099
83.0	0.583833D+00	-0.827964D+00	-54.81	1.026443	83.0	-0.216426D-01	-0.276369D-02	-172.72	0.000476
84.0	0.215986D+00	-0.979235D+00	-77.56	1.003550	84.0	-0.279619D-01	-0.662270D-02	-166.68	0.000826
85.0	-0.194261D+00	-0.969413D+00	-101.33	0.977498	85.0	-0.257128D-01	-0.933226D-02	-160.74	0.000801
86.0	-0.578468D+00	-0.797648D+00	-125.95	0.974868	86.0	-0.181152D-01	-0.831322D-02	-155.35	0.000397
87.0	-0.968312D+00	-0.490501D+00	-150.54	0.994556	87.0	-0.478771D-02	-0.222587D-02	-155.07	0.000028
88.0	-0.100827D+01	-0.984272D-01	-174.42	1.026304	88.0	0.912076D-02	0.813873D-02	41.74	0.000149
89.0	-0.967362D+00	0.311950D+00	162.13	1.033102	89.0	0.193800D-01	0.197648D-01	45.56	0.000766
90.0	-0.747175D+00	0.668693D+00	133.17	1.005421	90.0	0.231757D-01	0.282641D-01	50.65	0.001336

CIRCULAR PP POLARIZATION KA= 35.000					CIRCULAR OP POLARIZATION KA= 35.000				
THETA	REAL	IMAG	PHASE	NRCS	THETA	REAL	IMAG	PHASE	NRCS
90.0	-0.747175E+00	0.668693E+00	138.17	1.005421	90.0	0.231757D-01	0.282641D-01	50.65	0.001336
51.0	-0.384083D+00	0.906883D+00	112.95	0.969956	91.0	0.200821D-01	0.294480D-01	55.71	0.001270
92.0	0.554588D+00	0.980495D+00	86.75	0.964470	92.0	0.121197D-01	0.210734D-01	60.10	0.000591
93.0	0.487631D+00	0.871756D+00	60.78	0.977113	93.0	0.285162D-02	0.477601D-02	54.98	0.000025
94.0	0.825451D+00	0.596137D+00	35.84	1.036748	94.0	-0.409294D-02	-0.173557D-01	-103.34	0.000315
95.0	0.999166D+00	0.201645D+00	11.41	1.038992	95.0	-0.659260D-02	-0.363979D-01	-100.27	0.001368
96.0	0.970980D+00	-0.238153D+00	-13.79	0.998583	96.0	-0.484927D-02	-0.466694D-01	-95.93	0.002202
97.0	0.742521D+00	-0.636711D+00	-40.62	0.956815	97.0	-0.126105D-02	-0.436358D-01	-91.66	0.001906
98.0	0.360543D+00	-0.911377D+00	-68.42	0.960599	98.0	0.760440D-03	-0.269321D-01	-88.38	0.000726
99.0	-0.962587D-01	-0.100322D+01	-95.50	1.009906	99.0	-0.147639D-02	-0.774891D-03	-152.17	0.000003
100.0	-0.531034D+00	-0.877981D+00	-121.17	1.052489	100.0	-0.839594D-02	0.271094D-01	107.21	0.000805
101.0	-0.849970D+00	-0.563288D+00	-146.87	1.039686	101.0	-0.175272D-01	0.579597D-01	110.08	0.002607
102.0	-0.962999D+00	-0.118740D+00	-173.11	0.980387	102.0	-0.211981D-01	0.548971D-01	113.79	0.003599
103.0	-0.899861D+00	0.360037D+00	158.19	0.939377	103.0	-0.234174D-01	0.453953D-01	117.29	0.002609
104.0	-0.617732D+00	0.764593D+00	128.94	0.966196	104.0	-0.122690D-01	0.222874D-01	118.83	0.000647
105.0	-0.198453D+00	0.998240D+00	101.24	1.035867	105.0	-0.617875D-02	-0.708887D-02	-40.92	0.000117
106.0	0.264344D+00	0.100290D+01	75.20	1.070457	106.0	0.323718D-01	-0.333656D-01	-45.87	0.002161
107.0	0.665652D+00	0.763287D+00	48.91	1.025791	107.0	0.516397D-01	-0.483758D-01	-43.13	0.005007
108.0	0.912709D+00	0.338505D+00	20.35	0.947624	108.0	0.571674D-01	-0.473660D-01	-40.00	0.005569
109.0	0.946613D+00	-0.174105D+00	-10.42	0.926389	109.0	0.435933D-01	-0.334070D-01	-37.41	0.003012
110.0	0.756943D+00	-0.648213D+00	-40.58	0.993142	110.0	0.118531D-01	-0.104292D-01	-41.34	0.000249
111.0	0.385747D+00	-0.962778D+00	-68.17	1.075742	111.0	-0.300830D-01	0.124837D-01	157.41	0.001056
112.0	-0.805713D-01	-0.103396D+01	-94.46	1.075566	112.0	-0.686940D-01	0.279386D-01	157.87	0.005499
113.0	-0.530249D+00	-0.839130D+00	-122.29	0.985106	113.0	-0.898229D-01	0.323395D-01	160.37	0.009100
114.0	-0.852219D+00	-0.424911D+00	-153.50	0.906827	114.0	-0.833068D-01	0.235859D-01	162.88	0.007598
115.0	-0.963442D+00	0.101466D+00	173.98	0.938551	115.0	-0.474451D-01	0.136355D-01	163.97	0.002437
116.0	-0.830926D+00	0.601190D+00	143.11	1.051467	116.0	0.901411D-02	0.232233D-02	14.45	0.000087
117.0	-0.482564D+00	0.938730D+00	117.21	1.114082	117.0	0.688660D-01	-0.344380D-02	-2.86	0.004757
118.0	-0.311705D-02	0.102123D+01	90.17	1.042928	118.0	0.111743D+00	-0.260128D-02	-1.33	0.012493
119.0	0.844820D+00	0.824660D+00	58.55	0.975136	119.0	0.120223D+00	0.174453D-02	0.81	0.014625
120.0	0.851329D+00	0.402320D+00	25.29	0.886622	120.0	0.899245D-01	0.386914D-02	2.46	0.008101
121.0	0.943514D+00	-0.128577D+00	-7.37	1.003602	121.0	0.257601D-01	-0.112991D-02	-2.51	0.000665
122.0	0.865405D+00	-0.619103D+00	-35.58	1.132214	122.0	-0.522728D-01	-0.218048D-01	-164.53	0.002942
123.0	0.493932D+00	0.930714D+00	-62.04	1.110198	123.0	-0.118367D+00	-0.318825D-01	-164.92	0.015027
124.0	-0.243250D-01	-0.975272D+00	-91.43	0.951747	124.0	-0.148829D+00	-0.446844D-01	-163.29	0.024147
125.0	-0.546595D+00	-0.741118D+00	-126.41	0.848023	125.0	-0.130490D+00	-0.432377D-01	-161.69	0.018939
126.0	-0.922425D+00	-0.297190D+00	-162.14	0.939189	126.0	-0.669052D-01	-0.218048D-01	-161.95	0.004952
127.0	-0.103731D+01	0.226543D+00	167.68	1.127343	127.0	0.232042D-01	-0.174072D-01	36.88	0.000841
128.0	-0.848711D+00	0.676921D+00	141.42	1.178532	128.0	0.110085D+00	0.630413D-01	29.80	0.016093
129.0	-0.402872D+00	0.922714D+00	113.59	1.073706	129.0	0.163559D+00	0.973778D-01	30.77	0.036234
130.0	0.174167D+00	0.893582D+00	78.97	0.828822	130.0	0.163490D+00	0.102675D+00	32.13	0.037271
131.0	0.710624D+00	0.601074D+00	40.22	0.866560	131.0	0.107434D+00	0.689656D-01	32.70	0.016298
132.0	0.704063D+01	0.135132D+00	7.40	1.101168	132.0	0.124030D-01	0.182366D-03	0.84	0.000154
133.0	0.105455D+01	-0.363046D+00	-19.00	1.233840	133.0	-0.902185D-01	-0.843558D-01	-136.92	0.015255
134.0	0.738404D+00	-0.743689D+00	-45.20	1.098312	134.0	-0.162119D+00	-0.154643D+00	-136.88	0.051179
135.0	0.182148D+00	-0.893765D+00	-78.48	0.831993	135.0	-0.185371D+00	-0.180074D+00	-135.83	0.066789

CIRCULAR PP POLARIZATION KA= 35.000					CIRCULAR OP POLARIZATION KA= 35.000				
THETA	REAL	IMAG	PHASE	FRCS	THETA	REAL	IMAG	PHASE	FRCS
135.0	0.182148D+00	-0.893765D+00	-78.46	0.831993	135.0	-0.185371D+00	-0.160074D+00	-135.83	0.066789
136.0	-0.443832D+00	-0.771079D+00	-119.92	0.791549	136.0	-0.142262D+00	-0.141732D+00	-135.11	0.040326
137.0	-0.940038D+00	-0.416690D+00	-156.09	1.057302	137.0	-0.490196D+00	-0.422498D+00	-139.24	0.004188
138.0	-0.114162D+01	0.581762D+01	177.08	1.306684	138.0	6.631582D+00	0.912290D+00	55.30	0.012312
139.0	-0.974209D+00	0.506689D+00	152.52	1.205817	139.0	0.153560D+00	0.213356D+00	53.90	0.069734
140.0	-0.482622D+00	0.791752D+00	121.36	0.859795	140.0	0.195680D+00	0.275228D+00	54.59	0.114041
141.0	0.178849D+00	0.828096D+00	77.81	0.717730	141.0	0.168460D+00	0.242926D+00	55.26	0.087392
142.0	0.793587D+00	0.608128D+00	37.46	0.995755	142.0	0.824321D+00	0.113266D+00	53.95	0.019624
143.0	0.115329D+01	0.203460D+00	10.01	1.371473	143.0	-0.330727D+00	-0.799129D+00	-112.48	0.007480
144.0	0.112921D+01	-0.257827D+00	-12.86	1.341587	144.0	-0.137933D+00	-0.278667D+00	-116.82	0.093482
145.0	0.719438D+00	-0.631638D+00	-41.28	0.916557	145.0	-0.195325D+00	-0.391819D+00	-116.50	0.191674
146.0	0.545846D+00	-0.802686D+00	-86.11	0.647285	146.0	-0.184843D+00	-0.379825D+00	-115.95	0.178434
147.0	-0.842307D+00	-0.720103D+00	-131.73	0.931106	147.0	-0.109907D+00	-0.221315D+00	-116.41	0.061063
148.0	-0.112988D+01	-0.412572D+00	-159.94	1.446929	148.0	0.327997D+00	0.455292D+00	85.88	0.002084
149.0	-0.123225D+01	0.208743D+00	179.03	1.518883	149.0	0.118485D+00	0.335149D+00	71.07	0.125537
150.0	-0.903316D+00	0.443286D+00	153.86	1.012483	150.0	0.185869D+00	0.540121D+00	71.01	0.326278
151.0	-0.247838D+00	0.721969D+00	108.95	0.582662	151.0	0.191346D+00	0.569919D+00	71.41	0.360282
152.0	0.510194D+00	0.770367D+00	56.48	0.353763	152.0	0.129946D+00	0.383363D+00	71.28	0.163853
153.0	0.110306D+01	0.574672D+00	27.52	1.596989	153.0	0.239086D+00	0.214491D+00	41.90	0.001032
154.0	0.131355D+01	0.197673D+00	8.56	1.764494	154.0	-0.889595D+00	-0.405289D+00	-102.38	0.172173
155.0	0.105486D+01	-0.241266D+00	-12.88	1.170940	155.0	-0.160311D+00	-0.742756D+00	-102.81	0.580219
156.0	0.406654D+00	-0.603696D+00	-56.04	0.529816	156.0	-0.188442D+00	-0.845240D+00	-102.55	0.751633
157.0	-0.407600D+00	-0.775300D+00	-117.73	0.767228	157.0	-0.141901D+00	-0.637018D+00	-102.56	0.425928
158.0	-0.109635D+01	-0.701420D+00	-147.39	1.639776	158.0	-0.470938D+00	-0.141157D+00	-108.21	0.022712
159.0	-0.140384D+01	-0.403988D+00	-163.94	2.132857	159.0	0.615561D+00	0.493202D+00	82.89	0.247037
160.0	-0.120282D+01	0.252253D+00	178.80	1.447403	160.0	0.145567D+00	0.105012D+00	82.10	1.123974
161.0	-0.549571D+00	0.452292D+00	140.51	0.507083	161.0	0.176653D+00	0.129578D+00	82.24	1.710242
162.0	0.333031D+00	0.744749D+00	65.51	0.665562	162.0	0.145544D+00	0.107419D+00	82.28	1.175081
163.0	0.112844D+01	0.807355D+00	35.58	1.925199	163.0	0.602799D+00	0.378232D+00	86.16	0.147366
164.0	0.153869D+01	0.616307D+00	21.83	2.747389	164.0	-0.534608D+00	-0.618710D+00	-93.10	0.383922
165.0	0.139390D+01	0.224506D+00	9.15	1.993353	165.0	-0.116620D+00	-0.159082D+00	-94.19	2.544294
166.0	0.719516D+00	-0.253127D+00	-19.36	0.581776	166.0	-0.156123D+00	-0.214839D+00	-94.16	4.639944
167.0	-0.264695D+00	-0.673348D+00	-111.46	0.523462	167.0	-0.140433D+00	-0.196695D+00	-94.10	3.883760
168.0	-0.121576D+01	-0.406624D+00	-143.29	2.300036	168.0	-0.796082D+00	-0.922365D+00	-94.94	0.853411
169.0	-0.178515D+01	-0.875009D+00	-153.89	3.952393	169.0	0.413201D+00	0.825315D+00	89.71	0.681162
170.0	-0.174183D+01	-0.574755D+00	-161.74	3.364329	170.0	0.607825D+00	0.279403D+00	88.34	7.813148
171.0	-0.105652D+01	-0.771731D+00	-175.82	1.122197	171.0	0.125870D+00	0.427561D+00	88.31	18.296683
172.0	0.840716D+00	0.1922295D+00	80.31	0.245422	172.0	0.127918D+00	0.448616D+00	88.37	20.142007
173.0	0.133934D+01	0.590446D+00	36.48	2.774827	173.0	0.908956D+00	0.776960D+00	88.13	7.719794
174.0	0.233216D+01	0.129738D+00	29.09	7.121163	174.0	0.307108D+00	0.116285D+00	-88.49	1.353175
175.0	0.277997D+01	0.135025D+00	25.91	9.551444	175.0	-0.322987D+00	-0.716821D+00	-90.26	51.384322
176.0	0.255269D+01	-0.116007D+00	24.11	8.067780	176.0	-0.815234D+00	-0.145697D+00	-90.32	212.282992
177.0	0.190164D+01	0.806721D+00	22.99	4.267693	177.0	-0.109535D+00	-0.222927D+00	-90.28	496.977399
178.0	0.101011D+01	0.414009D+00	22.29	1.918844	178.0	-0.118877D+00	-0.290674D+00	-90.23	844.927968
179.0	0.279947D+00	0.112575D+00	-31.91	0.091043	179.0	-0.118356D+00	-0.337014D+00	-90.20	1135.798871
180.0	0.306716D+00	-0.1251002D+00	-29.30	0.000000	180.0	-0.116946D+00	-0.353481D+00	-90.19	1249.499388

CIRCULAR PP POLARIZATION KA= 40.000					CIRCULAR OP POLARIZATION KA= 40.000				
THETA	REAL	IMAG	PHASE	NRCS	THETA	REAL	IMAG	PHASE	NRCS
0.0	0.102398D+00	0.999301D+00	84.15	1.000088	0.0	-0.599282D-10	0.674830D-11	173.58	0.000000
1.0	0.104815D+00	0.998552D+00	84.01	1.000092	1.0	0.308723D-03	0.221164D-03	35.97	0.000000
2.0	0.112306D+00	0.996391D+00	83.57	1.000508	2.0	0.105555D-02	0.790509D-03	36.86	0.000002
3.0	0.125490D+00	0.993031D+00	82.80	1.001859	3.0	0.183819D-02	0.146121D-02	38.48	0.000006
4.0	0.145072D+00	0.988688D+00	81.65	0.998543	4.0	0.220307D-02	0.192836D-02	41.20	0.000009
5.0	0.171519D+00	0.983396D+00	80.11	0.996487	5.0	0.186414D-02	0.194886D-02	45.97	0.000007
6.0	0.204825D+00	0.976905D+00	78.16	0.996296	6.0	0.943475D-03	0.144257D-02	55.81	0.000003
7.0	0.244483D+00	0.968564D+00	75.83	0.997888	7.0	-0.249091D-03	0.534783D-03	114.98	0.000000
8.0	0.289645D+00	0.957379D+00	73.17	1.000469	8.0	-0.118702D-02	-0.480475D-03	-157.96	0.000002
9.0	0.339406D+00	0.942132D+00	70.19	1.002808	9.0	-0.146649D-02	-0.124773D-02	-139.65	0.000004
10.0	0.393047D+00	0.921565D+00	66.90	1.003768	10.0	-0.991325D-03	-0.149026D-02	-123.63	0.000003
11.0	0.450131D+00	0.894563D+00	63.29	1.002862	11.0	-0.575268D-05	-0.112812D-02	-90.29	0.000001
12.0	0.510391D+00	0.860260D+00	59.32	1.000545	12.0	0.100270D-02	-0.322696D-03	-17.84	0.000001
13.0	0.573462D+00	0.818031D+00	54.97	0.998034	13.0	0.754556D-02	0.577713D-03	20.50	0.000003
14.0	0.638585D+00	0.767399D+00	50.23	0.996693	14.0	0.136714D-02	0.117598D-02	40.70	0.000003
15.0	0.704408D+00	0.707682D+00	45.14	0.997287	15.0	0.568658D-03	0.119462D-02	64.54	0.000002
16.0	0.768981D+00	0.636886D+00	39.72	0.999507	16.0	-0.441543D-03	0.602395D-03	126.24	0.000001
17.0	0.829945D+00	0.559704D+00	34.00	1.002077	17.0	-0.114964D-02	-0.361004D-03	-162.57	0.000001
18.0	0.884805D+00	0.469661D+00	27.96	1.003468	18.0	-0.119256D-02	-0.128099D-02	-132.95	0.000003
19.0	0.931201D+00	0.368362D+00	21.58	1.002825	19.0	-0.542818D-03	-0.174961D-02	-107.24	0.000003
20.0	0.966967D+00	0.259800D+00	14.83	1.000551	20.0	0.471162D-03	-0.155449D-02	-73.14	0.000003
21.0	0.990098D+00	0.133465D+00	7.68	0.999107	21.0	0.132300D-02	-0.787312D-03	-30.76	0.000002
22.0	0.998549D+00	0.261418D-02	0.15	0.997106	22.0	0.154967D-03	0.184918D-03	6.80	0.000002
23.0	0.990084D+00	-0.134022D+00	-7.71	0.998227	23.0	0.987836D-03	0.881530D-03	41.75	0.000002
24.0	0.962279D+00	-0.273333D+00	-15.86	1.000693	24.0	-0.134427D-03	0.934275D-03	98.19	0.000001
25.0	0.912754D+00	-0.411847D+00	-24.29	1.002737	25.0	-0.130116D-02	0.272927D-03	168.15	0.000002
26.0	0.839580D+00	-0.545832D+00	-33.03	1.002827	26.0	-0.196141D-02	-0.821844D-03	-157.27	0.000005
27.0	0.741764D+00	-0.6711267D+00	-42.14	1.000813	27.0	-0.180879D-02	-0.183387D-02	-134.61	0.000007
28.0	0.619662D+00	-0.783720D+00	-51.67	0.998157	28.0	-0.946644D-03	-0.224903D-02	-112.83	0.000006
29.0	0.474976D+00	-0.978256D+00	-61.59	0.996936	29.0	0.149533D-03	-0.180677D-02	-85.27	0.000003
30.0	0.311030D+00	-0.949489D+00	-71.86	0.998268	30.0	0.862116D-03	-0.642334D-03	-36.69	0.000001
31.0	0.132220D+00	-0.991887D+00	-82.41	1.001322	31.0	0.745134D-03	0.757906D-03	45.49	0.000001
32.0	-0.560367D-01	-0.100032D+01	-93.21	1.003783	32.0	-0.234326D-03	0.177793D-02	97.51	0.000003
33.0	-0.247446D+00	-0.370746D+00	-104.30	1.003578	33.0	-0.165385D-02	0.197144D-02	125.99	0.000007
34.0	-0.434813D+00	-0.500857D+00	-115.76	1.000606	34.0	-0.282424D-02	0.129428D-02	155.38	0.000010
35.0	-0.609960D+00	-0.790561D+00	-127.65	0.997038	35.0	-0.412461D-02	0.148644D-03	177.28	0.000010
36.0	-0.763783D+00	-0.642174D+00	-139.94	0.995752	36.0	-0.232076D-02	-0.795823D-03	-161.07	0.000006
37.0	-0.886584D+00	-0.460367D+00	-152.56	0.997987	37.0	-0.703476D-03	-0.929196D-03	-127.13	0.000001
38.0	-0.968800D+00	-0.252085D+00	-165.41	1.002119	38.0	0.103346D-02	-0.213231D-04	-1.18	0.000001
39.0	-0.100204D+01	-0.261681D-01	-176.50	1.004767	39.0	0.212713D-02	0.162771D-02	37.42	0.000007
40.0	-0.980247D+00	0.206573D+00	168.10	1.003556	40.0	0.213174D-02	0.329501D-02	57.10	0.000015
41.0	-0.900731D+00	0.433583D+00	154.30	0.999311	41.0	0.116167D-02	0.416413D-02	74.41	0.000019
42.0	-0.764840D+00	0.640523D+00	140.04	0.995634	42.0	-0.142206D-03	0.372504D-02	92.19	0.000014
43.0	-0.578180D+00	0.813400D+00	125.41	0.995922	43.0	-0.922505D-03	0.214744D-02	114.25	0.000005
44.0	-0.350437D+00	0.936711D+00	110.51	1.000232	44.0	-0.549090D-03	-0.219520D-03	-158.21	0.000000
45.0	-0.949187D-01	0.997935D+00	95.43	1.004684	45.0	0.102390D-02	-0.213873D-02	-64.42	0.000006

CIRCULAR PP POLARIZATION KA= 40.000

CIRCULAR OP POLARIZATION KA= 40.000

THETA	REAL	IMAG	PHASE	NRCS	THETA	REAL	IMAG	PHASE	NRCS
45.0	0.943187D-01	0.997935D+00	95.43	1.004884	45.0	0.102390D-02	-0.213873D-02	-64.42	0.000006
46.0	0.170270D+00	0.987890D+00	80.12	1.005570	46.0	0.317823D-02	-0.293863D-02	-42.76	0.000019
47.0	0.317010D+00	0.902662D+00	64.44	1.001164	47.0	0.489320D-02	-0.240776D-02	-26.22	0.000030
48.0	0.663921D+00	0.744802D+00	48.29	0.995522	48.0	0.521340D-02	-0.102409D-02	-11.11	0.000014
49.0	0.848276D+00	0.523762D+00	31.69	0.993898	49.0	0.377021D-02	0.265145D-03	4.02	0.000018
50.0	0.965673D+00	0.255513D+00	14.82	0.998197	50.0	0.974874D-03	0.524300D-03	28.27	0.000001
51.0	0.100163D+01	-0.385556D-01	-2.20	1.004687	51.0	-0.211576D-02	-0.659408D-03	-162.69	0.000005
52.0	0.946023D+00	-0.333259D+00	-19.40	1.007116	52.0	-0.428617D-02	-0.289714D-02	-145.96	0.000027
53.0	0.800528D+00	-0.601566D+00	-36.92	1.002728	53.0	-0.476107D-02	-0.511592D-02	-132.94	0.000089
54.0	0.572949D+00	-0.816797D+00	-54.95	0.995428	54.0	-0.359262D-02	-0.604471D-02	-120.65	0.000039
55.0	0.283480D+00	-0.955049D+00	-73.47	0.992479	55.0	-0.162023D-02	-0.484999D-02	-108.47	0.000026
56.0	-0.396056D-01	-0.997880D+00	-92.27	0.997333	56.0	-0.123378D-03	-0.160783D-02	-94.39	0.000003
57.0	-0.362173D-00	-0.955116D+00	-111.17	1.005617	57.0	-0.601498D-04	0.264093D-02	91.30	0.000007
58.0	-0.648031D+00	-0.767426D+00	-130.18	1.006886	58.0	-0.156023D-02	0.632333D-02	103.88	0.000042
59.0	-0.863179D+00	-0.579092D+00	-149.52	1.003236	59.0	-0.376629D-02	0.799786D-02	115.22	0.000078
60.0	-0.979972D+00	-0.183276D+00	-169.41	0.993936	60.0	-0.520602D-02	0.713856D-02	126.10	0.000078
61.0	-0.980770D+00	0.169762D+00	170.18	0.994729	61.0	-0.453457D-02	0.430970D-02	137.46	0.000039
62.0	-0.860767D+00	0.506669D+00	149.52	0.997633	62.0	-0.129186D-02	0.950050D-03	143.67	0.000003
63.0	-0.629760D+00	0.781858D+00	128.85	1.007899	63.0	0.371875D-02	-0.135670D-02	-20.04	0.000016
64.0	-0.312527D+00	0.955355D+00	108.11	1.010377	64.0	0.866483D-02	-0.170218D-02	-11.12	0.000078
65.0	-0.525563D-01	0.999410D+00	86.99	1.001582	65.0	0.114459D-01	-0.352770D-03	-17.76	0.000131
66.0	0.417048D+00	0.930362D+00	65.23	0.990470	66.0	0.107052D-01	0.136030D-02	7.24	0.000116
67.0	0.728236D+00	0.677643D+00	42.94	0.999529	67.0	0.649691D-02	0.173801D-02	14.98	0.000045
68.0	0.936842D+00	0.350837D+00	20.53	1.000759	68.0	0.358465D-03	-0.311496D-03	-40.99	0.000000
69.0	0.100510D+01	-0.309671D-01	-1.76	1.012216	69.0	-0.535228D-02	-0.453404D-02	-139.73	0.000049
70.0	0.721504D+00	-0.411379D+00	-24.16	1.010516	70.0	-0.854042D-02	-0.923797D-02	-132.75	0.000158
71.0	0.675420D+00	-0.731245D+00	-47.10	0.996497	71.0	-0.835786D-02	-0.119739D-01	-124.92	0.000213
72.0	0.326816D+00	-0.937518D+00	-70.78	0.985749	72.0	-0.558394D-02	-4.107135D-01	-117.53	0.000146
73.0	-0.840353D-01	-0.992146D+00	-94.86	0.991478	73.0	-0.218130D-02	-0.497094D-02	-113.69	0.000029
74.0	-0.484060D+00	-0.879742D+00	-118.82	1.008261	74.0	-0.221169D-03	6.371686D-02	93.41	0.000014
75.0	-0.600871D+00	-0.612565D+00	-142.59	1.016655	75.0	-0.716309D-03	0.122583D-01	93.34	0.000151
76.0	-0.975707D+00	-0.231482D+00	-166.65	1.005589	76.0	-0.298603D-02	0.172810D-01	99.80	0.001308
77.0	-0.973409D+00	0.198424D+00	168.47	0.986976	77.0	-0.494098D-02	0.164496D-01	106.53	0.000302
78.0	-0.790596D+00	0.548569D+00	142.87	0.983326	78.0	-0.421378D-02	0.105001D-01	111.87	0.000128
79.0	-0.457807D+00	0.809384D+00	117.24	1.000591	79.0	0.402299D-03	0.125562D-02	72.23	0.000002
80.0	-0.353266D-01	0.100876D+01	92.01	1.018843	80.0	0.796564D-02	-0.743707D-02	-43.03	0.000119
81.0	0.396824D+00	0.925978D+00	66.80	1.014904	81.0	0.154499D-01	-0.123731D-01	-38.69	0.000392
82.0	0.753266D+00	0.651428D+00	40.85	0.991768	82.0	0.189665D-01	-0.122531D-01	-32.86	0.000510
83.0	0.959755D+00	0.237520D+00	13.90	0.977551	83.0	0.156551D-01	-0.820519D-02	-27.66	0.000312
84.0	0.968875D+00	-0.229319D+00	-13.35	0.991581	84.0	0.534232D-02	-0.307397D-02	-29.92	0.000038
85.0	0.772013D+00	-0.649664D+00	-40.08	1.018094	85.0	-0.891107D-02	0.183697D-03	178.82	0.000079
86.0	0.434337D+00	-0.927243D+00	-60.44	1.023267	86.0	-0.217861D-01	0.170218D-03	179.55	0.000475
87.0	-0.590587D-01	-0.997368D+00	-93.35	0.982230	87.0	-0.278960D-01	-0.212671D-02	-175.64	0.000782
88.0	-0.516603D+00	-0.840685D+00	-121.57	0.973630	88.0	-0.241988D-01	-0.386776D-02	-170.92	0.000601
89.0	-0.661646D+00	-0.490909D+00	-150.37	0.982622	89.0	-0.116058D-01	-0.206292D-02	-169.92	0.000139
90.0	-0.100776D+01	-0.249121D-01	-178.58	1.016192	90.0	0.524418D-02	0.441892D-02	40.12	0.000047

CIRCULAR PP POLARIZATION KA= 40.000

CIRCULAR OP POLARIZATION KA= 40.000

THETA	REAL	IMAG	PHASE	NRCS	THETA	REAL	IMAG	PHASE	NRCS
90.0	-0.100776D+01	-0.249121D+01	-178.58	1.016192	90.0	0.52418D-02	0.441892D-02	40.12	0.000047
91.0	-0.911984D+00	0.446300D+00	153.92	1.030898	91.0	0.198525D-01	0.136551D-01	34.52	0.000581
92.0	-0.589518D+00	0.810717D+00	126.02	1.004783	92.0	0.266841D-01	0.210937D-01	38.33	0.001157
93.0	-0.114456D+00	0.978232D+00	96.67	0.970039	93.0	0.235957D-01	0.211105D-01	42.49	0.001024
94.0	-0.395378D+00	0.904317D+00	66.38	0.978114	94.0	0.127009D-01	0.121365D-01	44.32	0.000313
95.0	0.807206D+00	0.602860D+00	36.75	1.015022	95.0	-0.770280D-03	-0.523847D-02	-98.27	0.000029
96.0	0.100877D+01	0.145485D+00	8.21	1.038780	96.0	-0.110734D-01	-0.251468D-01	-113.77	0.000755
97.0	0.940816D+00	-0.353592D+00	-20.60	1.010162	97.0	-0.147168D-01	-0.386781D-01	-110.83	0.001713
98.0	0.616662D+00	-0.764580D+00	-51.11	0.964866	98.0	-0.119816D-01	-0.386301D-01	-107.23	0.001536
99.0	0.121915D+00	-0.975316D+00	-82.88	0.966104	99.0	-0.639645D-02	0.227368D-01	-105.71	0.000558
100.0	-0.407005D+00	-0.922464D+00	-113.81	1.016594	100.0	-0.244016D-02	0.445712D-02	118.70	0.000026
101.0	-0.820443D+00	-0.612335D+00	-143.26	1.048065	101.0	-0.271915D-02	0.327993D-01	94.74	0.001083
102.0	-0.998777D+00	-0.123953D+00	-172.93	1.012920	102.0	-0.622461D-02	0.505147D-01	97.03	0.002591
103.0	-0.888528D+00	0.408238D+00	155.32	0.956132	103.0	-0.878512D-02	0.493535D-01	100.09	0.002513
104.0	-0.519985D+00	0.629912D+00	122.07	0.959138	104.0	-0.561108D-02	0.285688D-01	101.11	0.000848
105.0	-0.328352D+00	0.101161D+01	90.12	1.023355	105.0	0.530294D-02	-0.423667D-02	-38.62	0.000046
106.0	0.516724D+00	0.890155D+00	59.87	1.059379	106.0	0.209349D-01	-0.360121D-01	-59.83	0.001735
107.0	0.876148D+00	0.493077D+00	29.37	1.010702	107.0	0.336758D-01	-0.537731D-01	-57.94	0.004026
108.0	0.968523D+00	-0.641894D-01	-3.79	0.942157	108.0	0.347170D-01	-0.502944D-01	-55.38	0.003735
109.0	0.764312D+00	-0.609184D+00	-38.56	0.955278	109.0	0.189648D-01	-0.273429D-01	-55.23	0.001109
110.0	0.324653D+00	-0.965688D+00	-71.42	1.038301	110.0	-0.108922D-01	0.511708D-02	154.84	0.000145
111.0	-0.215442D+00	-0.101259D+01	-102.01	1.071750	111.0	-0.440040D-01	0.334406D-01	142.77	0.003055
112.0	-0.687278D+00	-0.726155D+00	-133.42	0.999467	112.0	-0.649554D-01	0.464482D-01	144.43	0.006377
113.0	-0.940501D+00	-0.134963D+00	-168.29	0.922553	113.0	-0.608449D-01	0.402901D-01	146.49	0.005325
114.0	-0.891515D+00	0.405954D+00	155.51	0.959241	114.0	-0.283372D-01	0.192321D-01	145.16	0.001192
115.0	-0.551415D+00	0.871971D+00	122.31	1.064287	115.0	0.228156D-01	-0.474909D-02	-11.76	0.000543
116.0	-0.275784D-01	0.109333D+01	91.52	1.080974	116.0	0.721994D-01	-0.223278D-01	-17.18	0.005711
117.0	0.509707D+00	0.865457D+00	58.92	0.974594	117.0	0.968433D-01	-0.271615D-01	-15.67	0.010116
118.0	0.802233D+00	0.354404D+00	21.93	0.900394	118.0	0.818349D-01	-0.205464D-01	-14.16	0.007123
119.0	0.958230D+00	-0.231844D+00	-15.38	0.979116	119.0	0.285826D-01	-0.064260D-02	-18.71	0.000911
120.0	0.699066D+00	-0.782924D+00	-48.24	1.101692	120.0	-0.436317D-01	-0.190242D-02	-177.42	0.001908
121.0	0.195308D+00	-0.101964D+01	-79.16	1.077803	121.0	-0.104426D+00	-0.105276D-02	-179.42	0.010906
122.0	-0.385905D+00	-0.884545D+00	-113.57	0.931343	122.0	-0.125174D+00	-0.421772D-02	-178.07	0.015686
123.0	-0.838800D+00	-0.265800D+00	-153.04	0.835556	123.0	-0.925015D-01	-0.443618D-02	-177.25	0.008576
124.0	-0.995456D+00	0.148634D+00	169.48	1.025096	124.0	-0.160651D-01	0.437948D-02	164.75	0.000277
125.0	-0.789308D+00	0.771697D+00	137.56	1.143655	125.0	0.734619D-01	0.220342D-01	16.65	0.005912
126.0	-0.285489D+00	0.982976D+00	106.20	1.047745	126.0	0.137520D+00	0.401052D-01	16.26	0.020520
127.0	0.336237D+00	0.871400D+00	68.90	0.872952	127.0	0.144917D+00	0.453319D-01	17.37	0.023056
128.0	0.843398D+00	0.431566D+00	27.10	0.857561	128.0	0.885720D-01	-0.272670D-01	17.11	0.008586
129.0	0.103736D+01	-0.166334D+00	-9.11	1.103778	129.0	-0.104704D-01	-0.137200D-01	-127.35	0.000298
130.0	0.832559D+00	-0.651594D+00	-39.72	1.171457	130.0	-0.110350D+00	-0.630167D-01	-150.27	0.016148
131.0	0.286452D+00	-0.942470D+00	-72.54	0.976052	131.0	-0.166313D+00	-0.960769D-01	-139.99	0.036891
132.0	-0.369039D+00	-0.844590D+00	-114.11	0.816152	132.0	-0.150528D+00	-0.894919D-01	-149.24	0.030849
133.0	-0.901516D+00	-0.388263D+00	-156.70	0.963479	133.0	-0.674401D-01	-0.361900D-01	-151.85	0.005885
134.0	-0.108147D+01	0.191995D+00	169.93	1.206442	134.0	0.491587D-01	0.495355D-01	45.22	0.004870
135.0	-0.824446D+00	0.666407D+00	140.22	1.150889	135.0	0.1463310D+00	0.131133D+00	41.48	0.039192

CIRCULAR OF POLARIZATION KA= 40.000

CIRCULAR PP POLARIZATION KA= 40.000

THETA	REAL	IMAG	PHASE	NRCS	THETA	REAL	IMAG	PHASE	NRCS
135.0	-0.82e+61D+00	0.68e+07D+00	140.22	1.150889	135.0	0.1408310D+00	0.131133D+00	41.48	0.039192
136.0	-0.22e+30D+00	0.901192D+00	103.99	0.861800	136.0	0.184506D+00	0.165989D+00	41.97	0.061578
137.0	-0.48e+08D+00	0.755326D+00	57.34	0.804857	137.0	0.139249D+00	0.125928D+00	42.12	0.035247
138.0	0.100351D+01	0.312105D+00	17.28	1.10e+45	138.0	0.303727D+01	0.154633D+01	26.98	0.001162
139.0	0.111080D+01	-0.272022D+00	-12.55	1.294980	139.0	-0.946093D+01	0.124243D+00	-127.35	0.024825
140.0	0.748464D+00	-0.636958D+00	-42.36	1.045949	140.0	-0.180176D+00	-0.229036D+00	-128.19	0.084921
141.0	0.584198D+01	-0.858249D+00	-86.11	0.740004	141.0	-0.186226D+00	-0.280154D+00	-127.79	0.092354
142.0	-0.670765D+00	-0.670561D+00	-135.01	0.895579	142.0	-0.108621D+00	-0.135077D+00	-128.80	0.030045
143.0	-0.112340D+01	-0.215091D+00	-169.16	1.308281	143.0	0.189741D+01	0.545270D+01	70.81	0.073333
144.0	-0.109404D+01	0.319549D+00	163.72	1.299025	144.0	0.139508D+00	0.249183D+00	60.76	0.081554
145.0	-0.582727D+00	0.714976D+00	129.18	0.850761	145.0	0.198247D+00	0.353281D+00	60.70	0.164108
146.0	0.196788D+00	0.812146D+00	76.38	0.698307	146.0	0.167940D+00	0.300217D+00	-0.78	0.118334
147.0	0.904136D+00	0.575500D+00	32.48	1.148707	147.0	0.616841D+01	0.905484D+01	55.74	0.012004
148.0	0.122030D+01	0.106392D+00	4.98	1.500850	148.0	-0.726581D+01	-0.197202D+00	-110.23	0.044168
149.0	0.992496D+00	-0.400038D+00	-21.95	1.145079	149.0	-0.174142D+00	-0.432980D+00	-111.91	0.217762
150.0	0.309771D+00	-0.735282D+00	-67.15	0.636598	150.0	-0.196660D+00	-0.491390D+00	-111.81	0.280139
151.0	-0.528624D+00	-0.763182D+00	-124.71	0.861891	151.0	-0.130167D+00	-0.315174D+00	-112.44	0.116278
152.0	-0.114262D+01	-0.475108D+00	-157.42	1.531316	152.0	-0.530380D+02	-0.457173D+01	96.62	0.021118
153.0	-0.128336D+01	0.752535D+02	179.65	1.546005	153.0	0.120770D+00	0.441410D+00	74.70	0.209428
154.0	-0.770061D+00	0.483992D+00	147.85	0.627242	154.0	0.190777D+00	0.680335D+00	74.30	0.499249
155.0	0.733946D+01	0.757209D+00	84.46	0.578753	155.0	0.173605D+00	0.617482D+00	74.34	0.411422
156.0	0.903763D+00	0.714648D+00	38.34	1.327509	156.0	0.783665D+01	0.234015D+00	71.49	0.060904
157.0	0.133108D+01	0.374231D+00	15.70	1.511817	157.0	-0.503742D+01	-0.332298D+00	-98.62	0.112959
158.0	0.114143D+01	-0.123235D+00	-6.17	1.318051	158.0	-0.153606D+00	-0.326795D+00	-100.50	0.710496
159.0	0.408328D+00	-0.572331D+00	-54.76	0.491044	159.0	-0.185212D+00	-0.993259D+00	-100.56	1.020867
160.0	-0.549143D+00	-0.786321D+00	-124.93	0.919859	160.0	-0.132800D+00	-0.682121D+00	-101.02	0.482926
161.0	-0.127275D+01	-0.674390D+00	-152.08	2.074695	161.0	-0.224850D+01	0.369325D+01	121.33	0.001870
162.0	-0.141204D+01	-0.278732D+00	-168.83	2.071536	162.0	0.941983D+01	0.879000D+01	83.88	0.781514
163.0	-0.074629D+00	0.241643D+00	164.59	0.826519	163.0	0.164644D+00	0.146083D+01	83.48	2.103114
164.0	0.106500D+00	0.674424D+00	81.03	0.266191	164.0	0.154261D+00	0.137610D+01	83.40	1.979009
165.0	0.108531D+01	0.839245D+00	37.71	1.882234	165.0	0.837603D+01	0.577673D+00	81.75	0.340722
166.0	0.158905D+01	0.660647D+00	22.58	2.961541	166.0	-0.249540D+01	-0.717776D+00	-91.99	0.515825
167.0	0.134960D+01	0.199839D+00	8.42	1.861348	167.0	-0.117199D+00	-0.196697D+01	-93.41	3.882695
168.0	0.437869D+00	-0.367310D+00	-39.99	0.326645	168.0	-0.153599D+00	-0.251803D+01	-93.50	6.323822
169.0	-0.753346D+00	-0.817331D+00	-132.67	1.235235	169.0	-0.122015D+00	-0.185840D+01	-93.76	3.468523
170.0	-0.167764D+01	-0.965028D+00	-150.04	3.745754	170.0	-0.408692D+01	0.265357D+01	147.01	0.002374
171.0	-0.187962D+01	-0.734749D+00	-158.65	4.072321	171.0	0.516251D+01	0.259522D+01	88.86	6.646020
172.0	-0.120571D+01	-0.189550D+00	-171.07	1.489654	172.0	0.116154D+00	0.472812D+01	88.59	22.368619
173.0	0.119191D+00	0.492748D+00	76.40	0.257003	173.0	0.129452D+00	0.513095D+01	88.55	26.343413
174.0	0.158652D+01	0.109704D+01	34.42	3.698703	174.0	0.920499D+01	0.267829D+01	88.03	7.181707
175.0	0.262975D+01	0.140581D+01	28.13	8.891917	175.0	0.240681D+01	-0.303101D+01	-89.55	9.554929
176.0	0.287803D+01	0.136869D+01	25.43	10.156363	176.0	-0.473227D+01	-0.117015D+02	-90.23	136.927529
177.0	0.232068D+01	0.103070D+01	23.94	6.446998	177.0	-0.101413D+00	-0.217829D+02	-90.27	472.763102
178.0	0.130588D+01	0.555919D+00	23.06	2.014374	178.0	-0.131403D+00	-0.311836D+02	-90.24	972.434658
179.0	0.373502D+00	0.153960D+00	22.59	0.163688	179.0	-0.142800D+00	-0.379145D+02	-90.22	1437.527495
180.0	0.360242D+08	-0.400112D+09	-6.34	0.000000	180.0	-0.145115D+00	-0.403534D+02	-90.21	1628.420914

CIRCULAR PP POLARIZATION KA= 45.000					CIRCULAR OP POLARIZATION KA= 45.000				
THETA	REAL	IMAG	PHASE	NRCS	THETA	REAL	IMAG	PHASE	NRCS
0.0	0.454144D+00	-0.891496D+00	-63.00	1.001030	0.0	-0.289582D-10	-0.145124D-10	-153.39	0.000000
1.0	0.451760D+00	-0.892731D+00	-63.16	1.001026	1.0	-0.318195D-03	-0.162941D-03	-152.89	0.000000
2.0	0.444197D+00	-0.894899D+00	-63.64	1.001021	2.0	-0.106417D-02	-0.570158D-03	-151.62	0.000001
3.0	0.430604D+00	-0.902331D+00	-64.50	1.000708	3.0	-0.173867D-02	-0.101222D-02	-146.79	0.000004
4.0	0.410008D+00	-0.912103D+00	-65.80	1.000039	4.0	-0.185630D-02	-0.124893D-02	-146.15	0.000005
5.0	0.381776D+00	-0.923672D+00	-67.55	0.999292	5.0	-0.124561D-02	-0.110378D-02	-135.45	0.000003
6.0	0.328370D+00	-0.937734D+00	-69.76	0.998956	6.0	-0.164577D-03	-0.590851D-03	-105.56	0.000000
7.0	0.312867D+00	-0.952708D+00	-72.38	0.999383	7.0	0.839978D-03	0.109374D-03	7.42	0.000001
8.0	0.252520D+00	-0.967811D+00	-75.38	1.000431	8.0	0.124901D-02	0.702302D-03	29.37	0.000002
9.0	0.195920D+00	-0.981834D+00	-78.71	1.001431	9.0	0.870720D-03	0.919746D-03	46.57	0.000002
10.0	0.132571D+00	-0.992003D+00	-82.39	1.001645	10.0	-0.375432D-04	0.659181D-03	93.26	0.000000
11.0	0.620156D-01	-0.998452D+00	-86.45	1.000753	11.0	-0.928075D-03	0.521696D-04	176.78	0.000001
12.0	-0.161112D-01	-0.999500D+00	-90.92	0.999260	12.0	-0.128050D-02	-0.584653D-03	-155.47	0.000002
13.0	-0.101657D+00	-0.993919D+00	-95.64	0.998209	13.0	-0.910561D-03	-0.904118D-03	-135.20	0.000002
14.0	-0.193717D+00	-0.980274D+00	-101.18	0.998464	14.0	-0.720798D-04	-0.744924D-03	-95.76	0.000001
15.0	-0.290700D+00	-0.956814D+00	-106.90	1.000000	15.0	0.697530D-03	-0.971804D-04	-7.93	0.000000
16.0	-0.390617D+00	-0.921527D+00	-112.97	1.001789	16.0	0.905913D-03	0.624845D-03	34.53	0.000001
17.0	-0.491357D+00	-0.872380D+00	-119.39	1.002478	17.0	0.617613D-02	0.105427D-02	68.42	0.000001
18.0	-0.590861D+00	-0.807659D+00	-126.19	1.001430	18.0	-0.479742D-03	0.987387D-03	116.86	0.000001
19.0	-0.686917D+00	-0.726297D+00	-133.40	0.999322	19.0	-0.122703D-02	0.366984D-03	163.35	0.000002
20.0	-0.776860D+00	-0.627815D+00	-141.05	0.997739	20.0	-0.135103D-02	-0.335351D-03	-166.06	0.000002
21.0	-0.872881D+00	-0.512865D+00	-149.11	0.997073	21.0	-0.755469D-03	-0.711520D-03	-136.72	0.000001
22.0	-0.924030D+00	-0.382213D+00	-157.53	0.999318	22.0	0.211570D-03	-0.481979D-03	-66.29	0.000000
23.0	-0.972460D+00	-0.237406D+00	-166.28	1.002041	23.0	0.966895D-03	0.283048D-03	16.32	0.000001
24.0	-0.998040D+00	-0.805485D-01	-175.39	1.002572	24.0	0.105427D-02	0.118018D-02	48.23	0.000003
25.0	-0.996666D+00	0.853440D-01	175.11	1.001025	25.0	0.437275D-03	0.169776D-02	75.56	0.000003
26.0	-0.946019D+00	0.255986D+00	165.16	0.998721	26.0	0.403505D-03	0.152044D-02	106.84	0.000003
27.0	-0.903648D+00	0.425612D+00	158.78	0.997774	27.0	-0.101806D-02	0.734610D-02	147.19	0.000002
28.0	-0.808906D+00	0.587086D+00	144.03	0.999000	28.0	-0.784097D-03	-0.207777D-03	-165.50	0.000001
29.0	-0.681962D+00	0.732352D+00	132.96	1.001812	29.0	0.206235D-03	-0.721848D-03	-74.14	0.000001
30.0	-0.524270D+00	0.853107D+00	121.57	1.002655	30.0	0.143980D-02	-0.510900D-03	-19.54	0.000002
31.0	-0.339121D+00	0.941485D+00	109.81	1.001398	31.0	0.222263D-02	0.302452D-03	7.75	0.000005
32.0	-0.132020D+00	0.990567D+00	97.60	0.998700	32.0	0.210753D-02	0.116590D-02	28.95	0.000006
33.0	0.800281D-01	0.994708D+00	84.94	0.997150	33.0	0.118481D-02	0.143918D-02	50.54	0.000003
34.0	0.310509D+00	0.949804D+00	71.20	0.918552	34.0	0.451442D-04	0.789296D-03	86.73	0.000001
35.0	0.522287D+00	0.853757D+00	58.54	1.001685	35.0	-0.578603D-03	-0.573929D-03	-135.23	0.000001
36.0	0.709595D+00	0.707110D+00	44.90	1.003530	36.0	-0.276242D-03	-0.198621D-02	-98.00	0.000004
37.0	0.859050D+00	0.513976D+00	30.89	1.002061	37.0	0.739902D-03	-0.270868D-02	-78.72	0.000008
38.0	0.958427D+00	0.287634D+00	16.40	0.998537	38.0	0.175611D-02	-0.237959D-02	-52.57	0.000009
39.0	0.997904D+00	0.264394D-01	1.52	0.996511	39.0	0.195923D-02	-0.123693D-02	-32.68	0.000005
40.0	0.970366D+00	-0.237969D+00	-13.78	0.998240	40.0	0.969984D-03	-0.833621D-04	-4.91	0.000001
41.0	0.872555D+00	-0.490651D+00	-29.35	1.002097	41.0	-0.880525D-03	-0.366673D-02	157.39	0.000001
42.0	0.706197D+00	-0.710815D+00	-45.19	1.003973	42.0	-0.270334D-03	-0.205148D-03	-175.68	0.000007
43.0	0.479153D+00	-0.878649D+00	-61.40	1.001673	43.0	-0.356636D-02	-0.140569D-02	-158.49	0.000015
44.0	0.206197D+00	-0.977162D+00	-78.08	0.97362	44.0	-0.306610D-02	-0.231547D-02	-142.94	0.000015
45.0	-0.512182D-01	-0.993801D+00	-95.24	0.995961	45.0	-0.159593D-02	-0.207756D-02	-127.53	0.000007

CIRCULAR PP POLARIZATION K_W 45.000

THETA	REAL	IMAG	PHASE	NRCS	THETA	REAL	IMAG	PHASE	NRCS
45.0	-0.912182D-01	-0.993601D+00	-95.28	0.995961	45.0	-0.159593D-02	-0.207756D-02	-127.53	0.000007
46.0	-0.356415D+00	-0.921953D+00	-112.74	0.993313	46.0	-0.121392D-03	-0.486245D-03	-105.22	0.000000
47.0	-0.650144D+00	-0.762403D+00	-130.46	1.003946	47.0	0.423278D-03	0.198252D-02	77.95	0.000004
48.0	-0.859599D+00	-0.524666D+00	-148.43	1.005422	48.0	-0.247576D-03	0.405004D-02	93.49	0.000017
49.0	-0.973716D+00	-0.227774D+00	-166.83	1.000003	49.0	-0.153866D-02	0.473243D-02	108.01	0.000025
50.0	-0.992264D+00	0.100087D+00	-174.24	0.995365	50.0	-0.230534D-02	0.369839D-02	121.94	0.000019
51.0	-0.903753D+00	0.423595D+00	154.69	0.996203	51.0	-0.157773D-02	0.160279D-02	134.55	0.000005
52.0	-0.711430D+00	0.704131D+00	135.30	1.001933	52.0	-0.760200D-03	-0.326195D-03	-23.35	0.000001
53.0	-0.432308D+00	0.904987D+00	115.53	1.005856	53.0	0.377942D-02	-0.104967D-02	-15.52	0.000015
54.0	-0.950851D-01	0.996919D+00	95.45	1.002889	54.0	0.596474D-02	-0.380030D-03	-3.65	0.000036
55.0	0.261106D+00	0.963323D+00	74.83	0.996167	55.0	0.608646D-02	0.843651D-03	7.89	0.000038
56.0	0.590296D+00	0.803422D+00	53.69	0.993936	56.0	0.396135D-02	0.127826D-02	17.89	0.000017
57.0	0.845412D+00	0.535234D+00	32.26	0.999486	57.0	0.616585D-03	-0.258801D-04	-2.40	0.000000
58.0	0.985656D+00	0.186575D+00	10.72	1.006328	58.0	-0.228518D-02	-0.289467D-02	-128.29	0.000014
59.0	0.984258D+00	-0.192000D+00	-11.04	1.005635	59.0	-0.343870D-02	-0.594818D-02	-119.96	0.000047
60.0	0.834847D+00	-0.546356D+00	-33.50	0.997667	60.0	-0.369742D-02	-0.739133D-02	-110.05	0.000062
61.0	0.554721D+00	-0.874644D+00	-56.16	0.992411	61.0	-0.115668D-02	-0.595006D-02	-101.00	0.000037
62.0	0.183906D+00	-0.981515D+00	-79.39	0.997193	62.0	-0.421385D-03	-0.186917D-02	-102.70	0.000054
63.0	-0.220102D+00	-0.978766D+00	-102.67	1.006427	63.0	-0.148524D-02	0.315876D-02	115.18	0.000012
64.0	-0.591134D+00	-0.811455D+00	-126.07	1.007663	64.0	-0.393671D-02	0.685614D-02	118.86	0.000063
65.0	-0.864981D+00	-0.500597D+00	-149.94	0.998750	65.0	-0.605304D-02	0.764448D-02	128.37	0.000095
66.0	-0.990518D+00	-0.956272D-01	-174.49	0.990865	66.0	-0.581112D-02	0.555622D-02	136.28	0.000065
67.0	-0.940710D+00	0.322180D+00	160.55	0.995304	67.0	-0.224579D-02	0.218370D-02	135.80	0.000010
68.0	-0.716727D+00	0.702118D+00	135.58	1.005949	68.0	-0.369677D-02	-0.347132D-03	-5.36	0.000014
69.0	-0.353548D+00	0.940660D+00	110.60	1.009837	69.0	0.942057D-02	-0.763422D-03	-4.63	0.000042
70.0	0.845594D+00	0.995916D+00	85.15	0.998999	70.0	0.120100D-01	0.496683D-03	2.37	0.000184
71.0	0.513105D+00	0.851786D+00	58.93	0.988876	71.0	0.989881D-02	0.156003D-02	8.96	0.000100
72.0	0.843062D+00	0.532525D+00	32.28	0.994337	72.0	0.387164D-02	0.429837D-03	6.34	0.000015
73.0	0.999388D+00	0.100108D+00	5.72	1.008798	73.0	-0.326586D-02	-0.346523D-02	-133.30	0.000023
74.0	0.940418D+00	-0.356787D+00	-20.77	1.011654	74.0	-0.822309D-02	-0.651961D-02	-133.99	0.000140
75.0	0.678933D+00	-0.739889D+00	-47.60	0.997557	75.0	-0.909216D-02	-0.116115D-01	-128.06	0.000217
76.0	0.245858D+00	-0.962230D+00	-75.69	0.986155	76.0	-0.636652D-02	-0.992282D-02	-122.68	0.000139
77.0	-0.240805D+00	-0.968000D+00	-103.97	0.995009	77.0	-0.250387D-02	-0.287301D-02	-131.01	0.000015
78.0	-0.673198D+00	-0.747867D+00	-131.99	1.012501	78.0	-0.213586D-03	0.706801D-02	91.73	0.000020
79.0	-0.945070D+00	-0.345492D+00	-159.92	1.012522	79.0	-0.585923D-03	0.153624D-01	92.18	0.000236
80.0	-0.985533D+00	0.117971D+00	171.46	0.993379	80.0	-0.230229D-02	0.177511D-01	97.39	0.000320
81.0	-0.779993D+00	0.612159D+00	141.87	0.983128	81.0	-0.254441D-02	0.142555D-01	101.34	0.000167
82.0	-0.375587D+00	0.926097D+00	112.08	0.998721	82.0	0.882678D-03	0.236774D-02	69.55	0.000006
83.0	0.127202D+00	0.100088D+01	82.76	1.017938	83.0	0.757829D-02	-0.833034D-02	-47.71	0.000127
84.0	0.598783D+00	0.807437D+00	53.44	1.010497	84.0	0.141421D-01	-0.145025D-01	-45.72	0.000410
85.0	0.913009D+00	0.390102D+00	23.14	0.985764	85.0	0.158660D-01	-0.139002D-01	-41.22	0.000445
86.0	0.980960D+00	-0.140410D+00	-8.15	0.981998	86.0	0.970242D-02	-0.803562D-02	-39.63	0.000159
87.0	0.777242D+00	-0.634980D+00	-39.25	1.007328	87.0	-0.327765D-02	-0.100581D-02	-162.94	0.000012
88.0	0.351169D+00	-0.948585D+00	-69.69	1.023133	88.0	-0.176347D-01	0.323702D-02	165.60	0.000321
89.0	-0.181852D+00	-0.984583D+00	-100.46	1.002474	89.0	-0.260195D-01	0.341921D-02	172.51	0.000689
90.0	-0.668795D+00	-0.727140D+00	-132.61	0.976019	90.0	-0.231786D-01	0.159356D-02	176.07	0.000540

CIRCULAR PP POLARIZATION KA=45.000

THETA 90.0	REAL -0.668795D+00	IMAG -0.727140D+00	PHASE -132.61	NRCS 0.976019	THETA 90.0	REAL -0.231786D-01	IMAG 0.159356D-02	PHASE 176.07	NRCS 0.000540
91.0	-0.961717D+00	-0.289757D+00	-165.44	0.987278	91.0	-0.924015D-02	0.139846D-02	171.39	0.000087
92.0	-0.963650D+00	0.304021D+00	-162.49	1.021049	92.0	0.978591D-02	0.503273D-02	27.22	0.000121
93.0	-0.663485D+00	0.763129D+00	171.00	1.022579	93.0	0.248491D-01	0.110390D-01	23.95	0.000739
94.0	-0.186690D+00	0.982139D+00	98.49	0.986116	94.0	0.286190D-01	0.186369D-01	27.35	0.001033
95.0	0.425258D+00	0.888427D+00	64.42	0.70147	95.0	0.194878D-01	0.107535D-01	28.89	0.000495
96.0	0.863744D+00	0.507973D+00	30.46	1.004090	96.0	0.244609D-02	-0.199057D-02	-39.14	0.000010
97.0	0.101623D+00	-0.296794D-01	-2.22	1.034285	97.0	-0.137637D-01	-0.190299D-01	-125.88	0.000552
98.0	0.822375D+00	-0.575900D+00	-35.00	1.007960	98.0	-0.215806D-01	-0.312719D-01	-124.61	0.001444
99.0	0.341373D+00	-0.921373D+00	-69.67	0.965483	99.0	-0.187064D-01	-0.299482D-01	-121.99	0.001247
100.0	-0.262601D+00	-0.954357D+00	-105.38	0.979757	100.0	-0.888077D-02	-0.123257D-01	-125.77	0.000231
101.0	-0.775121D+00	-0.656100D+00	-139.75	1.031279	101.0	0.105441D-02	0.152800D-01	86.05	0.000235
102.0	-0.100861D+01	-0.122843D+00	-173.06	1.032380	102.0	0.583869D-02	0.395688D-01	81.61	0.001600
103.0	-0.873617D+00	0.461373D+00	-152.16	0.876071	103.0	0.508930D-02	0.469116D-01	83.81	0.002227
104.0	-0.416215D+00	0.885594D+00	115.17	0.957512	104.0	0.297100D-02	0.311803D-01	84.56	0.000981
105.0	0.195084D+00	0.987862D+00	78.83	1.013929	105.0	0.441798D-02	-0.181363D-02	-22.32	0.000023
106.0	0.730246D+00	0.719366D+00	44.57	1.059776	106.0	0.105723D-01	-0.363067D-01	-73.76	0.001430
107.0	0.948833D+00	0.170870D+00	9.84	0.999092	107.0	0.168831D-01	-0.544705D-01	-72.78	0.003252
108.0	0.859648D+00	-0.453218D+00	-27.80	0.944429	108.0	0.157234D-01	-0.461109D-01	-71.17	0.002373
109.0	0.401923D+00	-0.908498D+00	-66.14	0.866910	109.0	0.226882D-02	-0.146895D-01	-81.22	0.000221
110.0	-0.210499D+00	-0.100686D+01	-101.81	1.058071	110.0	-0.202629D-01	0.240285D-01	130.14	0.000988
111.0	-0.736562D+00	-0.697477D+00	-136.56	1.028997	111.0	-0.401577D-01	0.502684D-01	128.62	0.004140
112.0	-0.966631D+00	-0.948971D-01	-174.30	0.943668	112.0	-0.430171D-01	0.509637D-01	130.17	0.004448
113.0	-0.806836D+00	0.532335D+00	145.61	0.956055	113.0	-0.211390D-01	0.267965D-01	128.27	0.001165
114.0	-0.319415D+00	0.975172D+00	108.14	1.052987	114.0	0.192894D-01	-0.852027D-02	-23.83	0.000485
115.0	0.298870D+00	0.985438D+00	73.13	1.060412	115.0	0.586603D-01	-0.362797D-01	-31.76	0.004751
116.0	0.793873D+00	0.570075D+00	35.68	0.955220	116.0	0.730422D-01	-0.433430D-01	-30.69	0.007214
117.0	0.957496D+00	-0.967661D-01	-5.77	0.926162	117.0	0.487918D-01	-0.289474D-01	-30.71	0.003221
118.0	0.716071D+00	-0.723949D+00	-45.31	1.036860	118.0	-0.745894D-02	-0.401815D-02	-151.69	0.000072
119.0	0.166077D+00	-0.103058D+01	-80.85	1.089686	119.0	-0.687623D-01	0.167951D-01	166.27	0.005010
120.0	-0.460750D+00	-0.874589D+00	-117.78	0.977196	120.0	-0.100658D+00	0.240207D-01	166.58	0.010709
121.0	-0.892244D+00	-0.322468D+00	-160.13	0.900095	121.0	-0.805463D-01	0.184591D-01	167.09	0.006829
122.0	-0.933333D+00	0.375569D+00	158.08	1.012184	122.0	0.128340D-01	0.878284D-02	145.71	0.000241
123.0	-0.556144D+00	0.897782D+00	121.78	1.115308	123.0	0.699500D-01	0.357300D-02	2.92	0.008906
124.0	0.794730D-01	0.100055D+01	85.46	1.007420	124.0	0.122604D+00	0.459787D-02	2.15	0.015053
125.0	0.689457D+00	0.635164D+00	42.65	0.878785	125.0	0.112097D+00	0.533436D-02	2.72	0.012594
126.0	0.990324D+00	-0.257450D-01	-1.89	0.981405	126.0	0.380937D-01	-0.272501D-02	-4.10	0.001459
127.0	0.817610D+00	-0.667721D+00	-38.76	1.137678	127.0	-0.634457D-01	-0.211377D-01	-161.57	0.004473
128.0	0.274903D+00	-0.984221D+00	-74.39	1.044283	128.0	-0.137591D+00	-0.398880D-01	-163.85	0.020519
129.0	-0.425589D+00	-0.825023D+00	-117.29	0.861789	129.0	-0.140334D+00	-0.418350D-01	-163.40	0.021444
130.0	-0.934581D+00	-0.270385D+00	-163.86	0.946550	130.0	-0.648908D-01	-0.154479D-01	-166.62	0.004449
131.0	-0.996508D+00	0.407030D+00	157.78	1.158701	131.0	0.515136D-01	0.335841D-01	33.10	0.003782
132.0	-0.566375D+00	0.875414D+00	122.90	1.087130	132.0	0.145801D+00	0.798014D-01	28.69	0.027626
133.0	0.156488D+00	0.907322D+00	60.21	1.047722	133.0	0.163483D+00	0.903410D-01	28.93	0.034888
134.0	0.164744D+00	-0.492222D+00	31.08	0.908917	134.0	0.904507D-01	-0.462636D-01	27.09	0.010322
135.0	0.107532D+01	-0.158717D+00	-8.40	1.181507	135.0	-0.365615D-01	-0.398755D-01	-132.52	0.002927

CIRCULAR PP POLARIZATION KA= 45.000

CIRCULAR OP POLARIZATION KA= 45.000

THETA	REAL	IMAG	PHASE	MRCS	THETA	REAL	IMAG	PHASE	MRCS
135.0	0.107532D+01	-0.158717D+00	-8.40	1.121507	135.0	-0.365615D-01	-0.398755D-01	-132.52	0.002927
136.0	0.787831D+00	-0.718735D+00	-42.39	1.136629	136.0	-0.188258D+00	-0.123779D+00	-140.14	0.037302
137.0	0.852184D+01	-0.909489D+00	-84.65	0.828723	137.0	-0.160853D+00	-0.150917D+00	-140.16	0.055884
138.0	-0.676779D+00	-0.641327D+00	-136.54	0.869330	138.0	-0.112875D+00	-0.902384D-01	-141.36	0.020885
139.0	-0.109877D+01	-0.558182D-01	-177.09	1.194629	139.0	0.206921D-01	0.399076D-01	62.59	0.002021
140.0	-0.946663D+00	0.546323D+00	150.01	1.194639	140.0	0.146275D+00	0.172603D+00	49.72	0.051188
141.0	-0.285242D+00	0.859857D+00	108.35	0.820717	141.0	0.192468D+00	0.225094D+00	49.47	0.087711
142.0	0.543518D+00	0.730158D+00	53.34	0.828542	142.0	0.131073D+00	0.188539D+00	48.57	0.039244
143.0	0.109557D+01	0.230572D+00	11.90	1.251244	143.0	-0.586493D-02	-0.14121D-01	-99.10	0.001194
144.0	0.105924D+01	-0.377466D+00	-19.61	1.264459	144.0	-0.141082D+00	-0.228838D+00	-121.65	0.072271
145.0	0.441089D+00	-0.780449D+00	-60.53	0.803625	145.0	-0.198718D+00	-0.316632D+00	-122.11	0.139745
146.0	-0.433535D+00	-0.774415D+00	-119.24	0.787671	146.0	-0.144545D+00	-0.223914D+00	-122.84	0.071031
147.0	0.108442D+01	-0.368723D+00	-161.22	1.311920	147.0	-0.812938D-07	0.230980D-01	109.39	0.000600
148.0	-0.114121D+01	0.221122D+00	169.03	1.351263	148.0	0.133627D+00	0.297283D+00	65.80	0.106233
149.0	-0.556374D+00	0.687058D+00	129.00	0.781601	149.0	0.200101D+00	0.432741D+00	65.18	0.227305
150.0	0.355544D+00	0.788882D+00	65.73	0.748817	150.0	0.153231D+00	0.321908D+00	64.55	0.127104
151.0	0.108408D+01	0.478063D+00	23.80	1.403768	151.0	0.196318D-01	-0.732999D-02	-20.47	0.004439
152.0	0.120709D+01	-0.789028D-01	-3.74	1.463284	152.0	-0.124482D+00	-0.386165D+00	-107.87	0.164615
153.0	0.537704D+00	-0.588912D+00	-42.72	0.753483	153.0	-0.157056D+00	-0.586480D+00	-108.57	0.382790
154.0	-0.313676D+00	-0.785718D+00	-111.76	0.715746	154.0	-0.157330D+00	-0.463166D+00	-109.15	0.230113
155.0	-0.110492D+01	-0.568339D+00	-152.78	1.543866	155.0	-0.290198D-01	-0.132530D-01	-155.45	0.001018
156.0	-0.126942D+01	-0.526885D-01	-177.62	1.614715	156.0	0.113828D+00	0.509889D+00	77.42	0.272948
157.0	-0.692718D+00	0.489807D+00	144.74	0.719769	157.0	0.189873D+00	0.882077D+00	76.68	0.679380
158.0	0.308811D+00	0.774143D+00	68.25	0.694662	158.0	0.157204D+00	0.688504D+00	76.17	0.432401
159.0	0.115637D+01	0.650286D+00	29.35	1.760065	159.0	0.366509D-01	0.399345D-01	47.46	0.002938
160.0	0.134166D+01	0.181401D+00	7.70	1.832970	160.0	-0.101488D+00	-0.495739D+00	-98.30	0.494345
161.0	0.730793D+00	-0.388506D+00	-28.00	0.684996	161.0	-0.178637D+00	-0.112805D+01	-99.00	1.304398
162.0	-0.340987D+00	-0.760633D+00	-114.15	0.694864	162.0	-0.153318D+00	-0.621409D+00	-99.44	0.073222
163.0	-0.124934D+01	-0.736284D+00	-149.49	2.102975	163.0	-0.422542D-01	-0.771640D-01	-119.27	0.007826
164.0	-0.144090D+01	-0.320673D+00	-167.45	2.179018	164.0	0.866787D-01	0.400202D+01	85.06	1.011550
165.0	-0.766958D+00	0.277091D+00	160.14	0.665004	165.0	0.163172D+00	0.167436D+01	84.43	2.830705
166.0	0.408781D+00	0.748784D+00	61.37	0.727780	166.0	0.146258D+00	0.140890D+01	84.07	2.006379
167.0	0.140272D+01	0.843472D+00	31.02	2.678074	167.0	0.500720D-01	0.139656D+00	70.27	0.022008
168.0	0.160303D+01	0.694766D+00	17.22	2.816507	168.0	-0.481926D-01	-0.157731D+01	-92.48	2.492548
169.0	0.437168D+00	-0.132123D+00	-8.57	0.716307	169.0	-0.142914D+00	-0.278604D+01	-92.98	7.561149
170.0	-0.102714D+00	-0.734938D+00	-124.37	0.792856	170.0	-0.136921D+00	-0.241440D+01	-93.24	5.872242
171.0	-0.165979D+01	-0.100334D+01	-148.85	3.761598	171.0	-0.594789D-01	-0.389162D+00	-101.62	0.087153
172.0	-0.193272D+01	-0.779454D+00	-156.04	4.342968	172.0	0.431633D-01	0.292318D+01	89.15	8.546851
173.0	-0.107807D+01	-0.133430D+00	-172.52	1.120095	173.0	0.116560D+00	0.552478D+01	88.79	30.536793
174.0	0.539181D+00	0.668500D+00	51.11	0.737609	174.0	0.127647D+00	0.581954D+01	88.65	29.387735
175.0	0.211398D+01	0.129934D+01	31.15	6.251383	175.0	0.782158D-01	0.999257D+00	85.52	1.004632
176.0	0.296322D+01	0.149795D+01	26.82	11.024526	176.0	-0.302121D-02	-0.801499D+01	-90.02	64.240032
177.0	0.269160D+01	0.124454D+01	24.81	8.793616	177.0	-0.814529D-01	-0.201788D+02	-90.23	407.191880
178.0	0.162140D+01	0.136512D+00	23.72	3.136512	178.0	-0.135595D+00	-0.326121D+02	-90.24	1063.564215
179.0	0.480946D+00	0.205657D+00	23.15	0.273604	179.0	-0.162687D+00	-0.419126D+02	-90.22	1756.695392
180.0	0.190320D+06	0.953902D+09	26.62	0.000000	180.0	-0.170205D+00	-0.453586D+02	-90.21	2057.423797

CIRCULAR POLARIZATION KA= 50.000

THETA	REAL	IMAG	PHASE	NRCS	THETA	REAL	IMAG	PHASE	NRCS
0.0	-0.868136D+00	0.499197D+00	145.96	0.995918	0.0	0.299629D-10	0.508618D-10	59.50	0.000000
1.0	-0.862883D+00	0.502267D+00	149.80	0.996839	1.0	0.318876D-03	0.108599D-03	18.81	0.000000
2.0	-0.858661D+00	0.511554D+00	149.22	0.996999	2.0	0.102577D-02	0.374875D-03	20.98	0.000001
3.0	-0.850374D+00	0.527148D+00	148.21	1.001022	3.0	0.155271D-02	0.646055D-03	22.59	0.000003
4.0	-0.836793D+00	0.549101D+00	146.73	1.037733	4.0	0.142760D-02	0.747188D-03	27.62	0.000003
5.0	-0.817153D+00	0.577271D+00	144.70	1.000998	5.0	0.625818D-03	0.574376D-03	42.55	0.000001
6.0	-0.791263D+00	0.611200D+00	142.32	0.999662	6.0	-0.397332D-03	0.167315D-03	157.17	0.000000
7.0	-0.759191D+00	0.650657D+00	139.43	0.998958	7.0	-0.101470D-02	-0.287575D-03	-154.18	0.000001
8.0	-0.720744D+00	0.697752D+00	136.13	0.999383	8.0	-0.863784D-03	-0.545310D-03	-147.74	0.000001
9.0	-0.675127D+00	0.737955D+00	132.45	1.000423	9.0	-0.998663D-04	-0.447427D-03	-102.58	0.000000
10.0	-0.623086D+00	0.774400D+00	128.36	1.001055	10.0	0.715446D-03	-0.381473D-04	-3.05	0.000001
11.0	-0.556923D+00	0.830988D+00	123.83	1.000680	11.0	0.191176D-02	0.436095D-03	23.32	0.000001
12.0	-0.481910D+00	0.878360D+00	118.82	0.999684	12.0	0.630376D-03	0.666300D-03	47.51	0.000001
13.0	-0.395529D+00	0.917828D+00	113.23	0.999086	13.0	-0.157614D-03	0.484113D-03	108.03	0.000000
14.0	-0.307078D+00	0.953996D+00	107.41	0.999584	14.0	-0.700125D-03	-0.805885D-05	-179.34	0.000000
15.0	-0.219236D+00	0.981688D+00	101.09	1.000701	15.0	-0.599297D-03	-0.444561D-05	-141.02	0.000001
16.0	-0.164313D-01	0.997767D+00	94.38	1.001382	16.0	0.827024D-04	-0.612337D-03	-82.31	0.000000
17.0	-0.479155D-01	0.999250D+00	87.25	1.000797	17.0	0.850769D-03	-0.288961D-03	-18.76	0.000001
18.0	-0.179329D+00	0.983670D+00	79.67	0.999373	18.0	0.114379D-02	0.259276D-03	12.77	0.000001
19.0	0.315408D+00	0.946156D+00	71.60	0.998482	19.0	0.752789D-03	0.618696D-03	39.42	0.000001
20.0	0.452439D+00	0.891309D+00	63.09	0.999133	20.0	-0.196226D-04	0.479456D-03	92.34	0.000000
21.0	0.585567D+00	0.817519D+00	54.17	1.000855	21.0	-0.581548D-03	-0.125114D-03	-167.86	0.000000
22.0	0.709293D+00	0.706329D+00	44.88	1.001977	22.0	-0.176445D-03	-0.816544D-03	-121.30	0.000001
23.0	0.819700D+00	0.576412D+00	35.17	1.001325	23.0	0.179239D-03	-0.112884D-02	-80.98	0.000001
24.0	0.906020D+00	0.421505D+00	25.00	0.999383	24.0	0.923186D-03	-0.852294D-03	-42.71	0.000002
25.0	0.967860D+00	0.241685D+00	14.35	0.996101	25.0	0.112952D-02	-0.209113D-03	-10.49	0.000001
26.0	0.997790D+00	0.570725D-01	3.27	0.998860	26.0	0.560054D-03	0.286999D-03	26.80	0.000000
27.0	0.990272D+00	-0.142455D+00	-8.19	1.000933	27.0	-0.425797D-03	0.205345D-03	154.25	0.000000
28.0	0.940577D+00	-0.342666D+00	-20.02	1.002106	28.0	-0.118537D-02	-0.461357D-03	-158.73	0.000002
29.0	0.845949D+00	-0.534241D+00	-32.27	1.001044	29.0	-0.120933D-02	-0.125475D-02	-133.94	0.000003
30.0	0.706560D+00	-0.706866D+00	-45.01	0.998886	30.0	-0.551626D-03	-0.156289D-02	-109.44	0.000003
31.0	0.526056D+00	-0.849348D+00	-58.23	0.998128	31.0	0.199356D-03	-0.107454D-02	-79.49	0.000001
32.0	0.311525D+00	-0.950119D+00	-71.85	0.999773	32.0	0.356324D-03	-0.373081D-04	-5.98	0.000000
33.0	0.731223D-01	-0.998319D+00	-85.81	1.001988	33.0	-0.331022D-03	0.893736D-03	110.32	0.000001
34.0	-0.176314D+00	-0.995190D+00	-100.14	1.002056	34.0	-0.144765D-02	0.113054D-02	142.01	0.000003
35.0	-0.421499D-00	-0.906645D+00	-114.93	0.999667	35.0	-0.218605D-02	0.606845D-03	164.49	0.000005
36.0	-0.644991D+00	-0.762600D+00	-130.22	0.997572	36.0	-0.193907D-02	-0.140742D-03	-175.85	0.000004
37.0	-0.827882D+00	-0.559367D+00	-145.96	0.998462	37.0	-0.773853D-03	-0.356709D-03	-155.25	0.000001
38.0	-0.951450D+00	-0.308632D+00	-162.04	1.001482	38.0	0.584279D-03	0.346838D-03	30.69	0.000000
39.0	-0.100111D+00	-0.272224D-01	-178.44	1.002466	39.0	0.127466D-02	0.154168D-02	52.17	0.000004
40.0	-0.965150D+00	0.262241D+00	164.73	1.000916	40.0	0.955013D-03	0.266343D-02	70.27	0.000008
41.0	-0.841472D+00	0.538202D+00	147.40	0.997737	41.0	0.864856D-04	0.262283D-02	88.11	0.000007
42.0	-0.636438D+00	0.769747D+00	129.58	0.997559	42.0	-0.395497D-03	0.140917D-02	105.68	0.000002
43.0	-0.365423D+00	0.931297D+00	111.42	1.000848	43.0	0.191640D-03	-0.102126D-03	-55.71	0.000000
44.0	-0.520338D-01	0.100634D+01	92.98	1.003387	44.0	0.163440D-02	-0.142371D-02	-40.06	0.000005
45.0	0.273344D-00	0.962733D+00	74.15	1.001583	45.0	0.314493D-02	-0.142625D-02	-24.59	0.000012

CIRCULAR PP POLARIZATION KA= 50.000

THETA	REAL	IMAG	PHASE	MPCS
45.0	0.273366D+00	0.962733D+00	74.15	1.001503
46.0	0.575717D+00	0.846184D+00	54.80	0.997550
47.0	0.818340D+00	0.571878D+00	34.95	0.996711
48.0	0.967392D+00	0.254666D+00	14.75	1.000605
49.0	0.997082D+00	0.094458D+00	-5.70	1.000062
50.0	0.895868D+00	-0.446822D+00	-26.50	1.002104
51.0	0.670181D+00	-0.740262D+00	-47.84	0.997131
52.0	0.346073D+00	-0.936188D+00	-69.71	0.996214
53.0	-0.330765D+00	-0.999993D+00	-91.89	1.001081
54.0	-0.414166D+00	-0.913812D+00	-114.28	1.004934
55.0	-0.732291D+00	-0.682328D+00	-137.02	1.001820
56.0	-0.939798D+00	-0.335980D+00	-160.35	0.995843
57.0	-0.995292D+00	0.730379D+00	-175.80	0.995941
58.0	-0.881677D+00	0.474503D+00	151.71	1.002508
59.0	-0.610011D+00	0.796059D+00	127.46	1.005824
60.0	-0.221522D+00	0.973332D+00	102.80	1.000345
61.0	0.216035D+00	0.973321D+00	77.49	0.994026
62.0	0.618712D+00	0.783700D+00	51.71	0.996989
63.0	0.902612D+00	0.436590D+00	25.81	1.005301
64.0	0.100291D+00	-0.429151D+00	-0.25	1.005854
65.0	0.890850D+00	-0.450999D+00	-26.85	0.997014
66.0	0.583626D+00	-0.807460D+00	-54.14	0.992621
67.0	0.143862D+00	-0.989631D+00	-81.73	1.000461
68.0	-0.332759D+00	-0.947708D+00	-109.31	1.008413
69.0	-0.734491D+00	-0.680760D+00	-137.17	1.002912
70.0	-0.955236D+00	-0.248466D+00	-165.78	0.992122
71.0	-0.963249D+00	0.257611D+00	165.03	0.994212
72.0	-0.714625D+00	0.699210D+00	135.82	1.006755
73.0	-0.287501D+00	0.962311D+00	106.63	1.008700
74.0	0.227154D+00	0.971590D+00	76.84	0.995966
75.0	0.688340D+00	0.718014D+00	46.21	0.989357
76.0	0.965162D+00	0.265199D+00	15.36	1.001868
77.0	0.997170D+00	-0.264611D+00	-15.25	1.012301
78.0	0.592851D+00	-0.722089D+00	-46.18	1.001455
79.0	0.205038D+00	-0.972174D+00	-78.09	0.987482
80.0	-0.349714D+00	-0.934442D+00	-110.52	0.995463
81.0	-0.799859D+00	-0.611042D+00	-142.62	1.013188
82.0	-0.999710D+00	-0.258222D+00	-174.71	1.008006
83.0	-0.943073D+00	-0.629100D+00	152.24	0.987504
84.0	-0.471811D+00	0.875437D+00	118.32	0.988955
85.0	0.928923D+00	0.100158D+00	84.70	1.011784
86.0	0.627693D+00	0.787529D+00	51.44	1.014201
87.0	0.949643D+00	0.296193D+00	17.32	0.989539
88.0	0.943073D+00	-0.306358D+00	-17.96	0.983059
89.0	0.603138D+00	-0.803386D+00	-53.10	1.009205
90.0	0.434653D+00	-0.100891D+00	-87.53	1.019786

CIRCULAR OP POLARIZATION KA= 50.000

THETA	REAL	IMAG	PHASE	MPCS
45.0	0.314493D+02	-0.142625D+02	-24.39	0.000012
46.0	0.343505D+02	-0.594711D+03	-9.82	0.000012
47.0	0.214074D+02	0.769938D+04	2.06	0.000005
48.0	-0.100638D+03	-0.318602D+03	-107.53	0.000000
49.0	-0.200014D+02	-0.183048D+02	-137.54	0.000007
50.0	-0.254235D+02	-0.349031D+02	-126.07	0.000019
51.0	-0.174304D+02	-0.394871D+02	-113.82	0.000019
52.0	-0.635332D+03	-0.282020D+02	-104.45	0.000007
53.0	-0.472618D+03	0.380002D+03	141.20	0.000000
54.0	-0.165092D+02	0.312245D+02	117.87	0.000012
55.0	-0.330620D+02	0.427225D+02	127.74	0.000029
56.0	-0.368828D+02	0.344908D+02	138.13	0.000027
57.0	-0.217499D+02	0.163381D+02	143.09	0.000007
58.0	0.135359D+02	0.401187D+03	16.51	0.000002
59.0	0.496232D+02	0.656941D+03	7.54	0.000025
60.0	0.658879D+02	0.185027D+02	15.69	0.000047
61.0	0.531952D+02	0.233338D+02	23.58	0.000034
62.0	0.206540D+02	0.683752D+03	18.31	0.000005
63.0	-0.107886D+02	-0.258119D+02	-109.89	0.000010
64.0	-0.237548D+02	-0.675840D+02	-109.37	0.000051
65.0	-0.172507D+02	-0.810720D+02	-102.01	0.000066
66.0	-0.681128D+03	-0.565471D+02	-96.67	0.000042
67.0	-0.110611D+02	-0.339195D+03	-162.95	0.000031
68.0	-0.346765D+02	0.503705D+02	124.54	0.000037
69.0	-0.814819D+02	0.763719D+02	124.86	0.000096
70.0	-0.645813D+02	0.647966D+03	13.90	0.000084
71.0	-0.274154D+02	0.307988D+02	131.67	0.000017
72.0	0.398391D+02	0.443461D+03	2.12	0.000016
73.0	0.102238D+01	-0.546352D+03	-3.06	0.000105
74.0	0.121272D+01	0.823137D+03	2.00	0.000147
75.0	0.814338D+02	0.671593D+03	4.71	0.000067
76.0	0.271398D+03	-0.182266D+02	-81.53	0.000003
77.0	-0.711272D+02	-0.658856D+02	-137.19	0.000094
78.0	-0.101440D+01	-0.310398D+03	-134.29	0.000211
79.0	-0.600815D+02	-0.423244D+02	-130.42	0.000152
80.0	-0.325547D+02	-0.218446D+02	-146.38	0.000015
81.0	0.368457D+03	0.839102D+02	87.35	0.000071
82.0	0.101683D+02	0.163677D+01	86.45	0.000269
83.0	-0.271722D+04	0.165030D+01	90.09	0.000272
84.0	-0.492259D+03	0.790558D+02	86.44	0.000063
85.0	0.448537D+02	-0.493991D+02	-47.76	0.000055
86.0	0.101417D+01	-0.148289D+01	-55.63	0.000323
87.0	0.125450D+01	-0.163782D+01	-52.67	0.000429
88.0	0.742601D+02	-0.990214D+02	-53.13	0.000153
89.0	-0.492863D+02	-0.806407D+04	-179.06	0.000024
90.0	-0.182936D+01	0.684062D+02	159.50	0.000381

CIRCULAR PP POLARIZATION KA= 50.000

THETA 90.0	REAL	IMAG	PHASE -87.53	MSCS 1.019786	THETA 90.0	REAL	IMAG	PHASE 159.50	MSCS 0.000381
91.0	-0.537706D+00	-0.838556D+00	-122.67	0.000304	91.0	-0.238777D-01	0.795668D-02	161.57	0.000633
92.0	-0.924858D+00	-0.349599D+00	-159.29	0.977644	92.0	-0.162730D-01	0.524730D-02	162.13	0.000292
93.0	-0.964461D+00	-0.274362D+00	-164.13	1.006423	93.0	0.199200D-02	0.320366D-02	58.13	0.000014
94.0	-0.631058D+00	0.791719D+00	-128.56	1.025053	94.0	0.210187D-01	0.440744D-02	11.83	0.000461
95.0	-0.424997D-01	0.996487D+00	-92.44	0.994793	95.0	0.293338D-01	0.679419D-02	13.04	0.000907
96.0	0.571997D+00	0.803193D+00	54.54	0.972300	96.0	0.214150D-01	0.527843D-02	13.85	0.000486
97.0	0.960480D+00	0.285539D+00	16.55	1.004377	97.0	0.165752D-02	-0.333994D-02	-63.61	0.000014
98.0	0.953430D+00	-0.348589D+00	-40.08	1.030544	98.0	-0.182069D-01	-0.160288D-01	-138.64	0.000588
99.0	0.541376D+00	-0.838443D+00	-57.45	0.986075	99.0	-0.267055D-01	-0.239587D-01	-138.10	0.001287
100.0	-0.108509D+00	-0.977078D+00	-96.34	0.966456	100.0	-0.200222D-01	-0.184137D-01	-137.40	0.000740
101.0	-0.716676D+00	-0.700313D+00	-135.66	1.004063	101.0	-0.399811D-02	0.165176D-02	157.55	0.000019
102.0	-0.101155D+01	-0.119772D+00	-173.24	1.036774	102.0	0.105888D-01	0.263914D-01	68.14	0.000809
103.0	-0.952800D+00	0.517472D+00	-148.75	0.995045	103.0	0.158456D-01	0.397338D-01	68.28	0.001834
104.0	-0.306313D+00	0.930542D+00	-108.22	0.959737	104.0	0.117761D-01	0.302014D-01	66.70	0.001051
105.0	0.381379D+00	0.928863D+00	67.66	1.006752	105.0	0.481608D-02	-0.213821D-03	-2.54	0.000023
106.0	0.691036D+00	0.499962D+00	29.30	1.043906	106.0	0.140151D-02	-0.346576D-01	-87.68	0.001203
107.0	0.980791D+00	-0.167079D+00	-9.67	0.990259	107.0	0.209395D-02	-0.512193D-01	-87.66	0.002628
108.0	0.605604D+00	-0.765247D+00	-51.64	0.952358	108.0	0.150112D-02	-0.373502D-01	-87.70	0.001397
109.0	-0.575474D-01	-0.100540D+01	-93.28	1.014137	109.0	-0.572092D-02	0.583759D-03	174.17	0.000033
110.0	-0.688968D+00	-0.759338D+00	-132.22	1.051271	110.0	-0.179026D-01	0.599641D-01	114.13	0.001918
111.0	-0.980814D+00	-0.133771D+00	-172.23	0.979891	111.0	-0.251695D-01	0.559744D-01	114.21	0.003767
112.0	-0.788851D+00	0.568711D+00	-144.21	0.945718	112.0	-0.165269D-01	0.380131D-01	113.50	0.001716
113.0	-0.206979D+00	0.992654D+00	101.78	1.028203	113.0	0.943410D-02	-0.283606D-02	-16.73	0.000097
114.0	0.475301D+00	0.911459D+00	62.46	1.056690	114.0	0.392107D-01	-0.408185D-01	-46.15	0.003204
115.0	0.974693D+00	0.354215D+00	21.17	0.962131	115.0	0.507667D-01	-0.525195D-01	-45.97	0.005336
116.0	0.896703D+00	-0.396112D+00	-24.07	0.943147	116.0	0.292434D-01	-0.322004D-01	-47.76	0.001892
117.0	0.402642D+00	-0.942342D+00	-66.87	1.050505	117.0	-0.188586D-01	0.516527D-02	164.68	0.000382
118.0	-0.290698D+00	-0.985521D+00	-106.43	1.055757	118.0	-0.650740D-01	0.350363D-01	151.70	0.005462
119.0	-0.832981D+00	-0.492455D+00	-149.41	0.936369	119.0	-0.755566D-01	0.403336D-01	151.91	0.007335
120.0	-0.935848D+00	0.273314D+00	163.72	0.950512	120.0	-0.354702D-01	0.220144D-01	148.17	0.001743
121.0	-0.537846D+00	0.889506D+00	121.16	1.080500	121.0	0.361230D-01	-0.399701D-02	-6.31	0.001321
122.0	0.154809D+00	0.100879D+01	81.28	1.041622	122.0	0.940533D-01	-0.202313D-01	-12.14	0.009255
123.0	0.769807D+00	0.559331D+00	36.00	0.904454	123.0	0.955558D-01	-0.204336D-01	-12.07	0.009548
124.0	0.966028D+00	-0.206488D+00	-12.07	0.975847	124.0	-0.315895D-01	-0.117432D-01	-20.29	0.001136
125.0	0.624094D+00	-0.850506D+00	-53.73	1.112854	125.0	-0.617901D-01	-0.545768D-02	174.95	0.003848
126.0	-0.765093D-01	-0.100028D+01	-94.37	1.006405	126.0	-0.123197D+00	-0.525805D-02	-177.56	0.015205
127.0	-0.745268D+00	-0.568576D+00	-142.66	0.878733	127.0	-0.106495D+00	-0.395968D-02	-177.87	0.011357
128.0	-0.995100D+00	0.190813D+00	169.14	1.026671	128.0	-0.152861D-01	0.772379D-02	153.19	0.000293
129.0	-0.667802D+00	0.829488D+00	-128.82	1.134606	129.0	0.943335D-01	0.282415D-01	16.67	0.009695
130.0	0.608084D-01	0.970536D+00	86.41	0.945639	130.0	0.148164D+00	0.411791D-01	15.53	0.023648
131.0	0.768453D+00	0.532661D+00	34.73	0.874249	131.0	0.104502D+00	0.268394D-01	14.40	0.011641
132.0	0.102800D+01	-0.216881D+00	-11.91	1.103811	132.0	-0.137431D-01	-0.178354D-01	-127.62	0.000507
133.0	0.667326D+00	-0.824270D+00	-51.01	1.124745	133.0	-0.130090D+00	-0.683262D-01	-152.28	0.021571
134.0	-0.111514D+00	-0.924067D+00	-96.86	0.866334	134.0	-0.163840D+00	-0.841120D-01	-152.83	0.033918
135.0	-0.438614D+00	-0.4461893D+00	-151.15	0.916619	135.0	-0.870320D-01	-0.391427D-01	-155.78	0.009107

CIRCULAR OP POLARIZATION KA= 50.000

THETA 90.0	REAL	IMAG	PHASE -87.53	MSCS 1.019786	THETA 90.0	REAL	IMAG	PHASE 159.50	MSCS 0.000381
91.0	-0.537706D+00	-0.838556D+00	-122.67	0.000304	91.0	-0.238777D-01	0.795668D-02	161.57	0.000633
92.0	-0.924858D+00	-0.349599D+00	-159.29	0.977644	92.0	-0.162730D-01	0.524730D-02	162.13	0.000292
93.0	-0.964461D+00	0.274362D+00	164.13	1.006423	93.0	0.199200D-02	0.320366D-02	58.13	0.000014
94.0	-0.631058D+00	0.791719D+00	128.56	1.025053	94.0	0.210187D-01	0.440744D-02	11.83	0.000461
95.0	-0.424997D-01	0.996487D+00	92.44	0.994793	95.0	0.293338D-01	0.679419D-02	13.04	0.000907
96.0	0.571997D+00	0.803193D+00	54.54	0.972300	96.0	0.214150D-01	0.527843D-02	13.85	0.000486
97.0	0.960480D+00	0.285539D+00	16.55	1.004377	97.0	0.165752D-02	-0.333994D-02	-63.61	0.000014
98.0	0.953430D+00	-0.348589D+00	-40.08	1.030544	98.0	-0.182069D-01	-0.160288D-01	-138.64	0.000588
99.0	0.541376D+00	-0.838443D+00	-57.45	0.986075	99.0	-0.267055D-01	-0.239587D-01	-138.10	0.001287
100.0	-0.108509D+00	-0.977078D+00	-96.34	0.966456	100.0	-0.200222D-01	-0.184137D-01	-137.40	0.000740
101.0	-0.716676D+00	-0.700313D+00	-135.66	1.004063	101.0	-0.399811D-02	0.165176D-02	157.55	0.000019
102.0	-0.101155D+01	-0.119772D+00	-173.24	1.036774	102.0	0.105888D-01	0.263914D-01	68.14	0.000809
103.0	-0.952800D+00	0.517472D+00	-148.75	0.995045	103.0	0.158456D-01	0.397338D-01	68.28	0.001834
104.0	-0.306313D+00	0.930542D+00	108.22	0.959737	104.0	0.117761D-01	0.302014D-01	66.70	0.001051
105.0	0.381379D+00	0.928863D+00	67.66	1.006752	105.0	0.481608D-02	-0.213821D-03	-2.54	0.000023
106.0	0.691036D+00	0.499962D+00	29.30	1.043906	106.0	0.140151D-02	-0.346576D-01	-87.68	0.001203
107.0	0.980791D+00	-0.167079D+00	-9.67	0.990259	107.0	0.209395D-02	-0.512193D-01	-87.66	0.002628
108.0	0.605604D+00	-0.765247D+00	-51.64	0.952358	108.0	0.150112D-02	-0.373502D-01	-87.70	0.001397
109.0	-0.575474D-01	-0.100540D+01	-93.28	1.014137	109.0	-0.572092D-02	0.583759D-03	174.17	0.000033
110.0	-0.688968D+00	-0.759338D+00	-132.22	1.051271	110.0	-0.179026D-01	0.599641D-01	114.13	0.001918
111.0	-0.980814D+00	-0.133771D+00	-172.23	0.979891	111.0	-0.251695D-01	0.559744D-01	114.21	0.003767
112.0	-0.788851D+00	0.568711D+00	-144.21	0.945718	112.0	-0.165269D-01	0.380131D-01	113.50	0.001716
113.0	-0.206979D+00	0.992654D+00	101.78	1.028203	113.0	0.943410D-02	-0.283606D-02	-16.73	0.000097
114.0	0.475301D+00	0.911459D+00	62.46	1.056690	114.0	0.392107D-01	-0.408185D-01	-46.15	0.003204
115.0	0.974693D+00	0.354215D+00	21.17	0.962131	115.0	0.507667D-01	-0.525195D-01	-45.97	0.005336
116.0	0.896703D+00	-0.396112D+00	-24.07	0.943147	116.0	0.292434D-01	-0.322004D-01	-47.76	0.001892
117.0	0.402642D+00	-0.942342D+00	-66.87	1.050505	117.0	-0.188586D-01	0.516527D-02	164.68	0.000382
118.0	-0.290698D+00	-0.985521D+00	-106.43	1.055757	118.0	-0.650740D-01	0.350363D-01	151.70	0.005462
119.0	-0.832981D+00	-0.492455D+00	-149.41	0.936369	119.0	-0.755566D-01	0.403336D-01	151.91	0.007335
120.0	-0.935848D+00	0.273314D+00	163.72	0.950512	120.0	-0.354702D-01	0.220144D-01	148.17	0.001743
121.0	-0.537846D+00	0.889506D+00	121.16	1.080500	121.0	0.361230D-01	-0.399701D-02	-6.31	0.001321
122.0	0.154809D+00	0.100879D+01	81.28	1.041622	122.0	0.940533D-01	-0.202313D-01	-12.14	0.009255
123.0	0.769807D+00	0.559331D+00	36.00	0.904454	123.0	0.955558D-01	-0.204336D-01	-12.07	0.009548
124.0	0.966028D+00	-0.206488D+00	-12.07	0.975847	124.0	-0.315895D-01	-0.117432D-01	-20.29	0.001136
125.0	0.624094D+00	-0.850506D+00	-53.73	1.112854	125.0	-0.617901D-01	-0.545768D-02	174.95	0.003848
126.0	-0.765093D-01	-0.100028D+01	-94.37	1.006405	126.0	-0.123197D+00	-0.525805D-02	-177.56	0.015205
127.0	-0.745268D+00	-0.568576D+00	-142.66	0.878733	127.0	-0.106495D+00	-0.395968D-02	-177.87	0.011357
128.0	-0.995100D+00	0.190813D+00	169.14	1.026671	128.0	-0.152861D-01	0.772379D-02	153.19	0.000293
129.0	-0.667802D+00	0.829488D+00	-128.82	1.134606	129.0	0.943335D-01	0.282415D-01	16.67	0.009695
130.0	0.608084D-01	0.970536D+00	86.41	0.945639	130.0	0.148164D+00	0.411791D-01	15.53	0.023648
131.0	0.768453D+00	0.532661D+00	34.73	0.874249	131.0	0.104502D+00	0.268394D-01	14.40	0.011641
132.0	0.102800D+01	-0.264881D+00	-11.91	1.103812	132.0	-0.137431D-01	-0.175348D-01	-177.62	0.000507
133.0	0.667326D+00	-0.827470D+00	-51.01	1.012184	133.0	-0.130009D+00	-0.683262D-01	-152.28	0.021571
134.0	-0.111514D+00	-0.974067D+00	-96.88	0.866334	134.0	-0.163840D+00	-0.841127D-01	-152.83	0.003918
135.0	-0.838614D+00	-0.461893D+00	-151.15	0.916169	135.0	-0.870320D-01	-0.391420D-01	-155.78	0.009107

CIRCULAR POLARIZATION KA= 50.000					CIRCULAR OP POLARIZATION KA= 50.000				
THETA	REAL	IMAG	PHASE	MRCS	THETA	REAL	IMAG	PHASE	MRCS
135.0	-0.63614D+00	-0.461893D+00	-151.15	0.916619	135.0	-0.870330D+01	-0.391877D-01	-155.76	0.009107
136.0	-0.103728D+01	0.273043D+00	165.52	1.192384	136.0	0.532842D+01	0.505173D+01	43.48	0.005392
137.0	-0.613631D+00	0.829522D+00	128.58	1.060393	137.0	0.163231D+00	0.127612E+00	37.99	0.042776
138.0	0.230287D+00	0.862078D+00	75.04	0.796211	138.0	0.165385D+00	0.176361E+00	37.38	0.043319
139.0	0.945091D+00	0.364855D+00	21.11	1.063316	139.0	0.538058D+01	0.289541E+01	28.30	0.003734
140.0	0.106548D+01	-0.348178D+00	-18.11	1.254779	140.0	-0.985260D-01	-0.113320D+00	-131.01	0.022549
141.0	0.493650D+00	-0.830296D+00	-59.27	0.933082	141.0	-0.487484D+00	-0.201170D+00	-132.98	0.075620
142.0	-0.412670D+00	-0.788756D+00	-117.77	0.786632	142.0	-0.149580D+00	-0.175516D+00	-133.93	0.046426
143.0	-0.106636D+01	-0.249065D+00	-166.85	1.199164	143.0	-0.747061D+02	0.176416D+01	112.95	0.000367
144.0	-0.102412D+01	0.432197D+00	157.12	1.235610	144.0	0.142577D+00	0.210971D+00	55.95	0.064837
145.0	-0.295689D+00	0.827739D+00	109.66	0.772584	145.0	0.196699D+00	0.281512D+00	55.06	0.117940
146.0	0.646770D+00	0.692701D+00	46.96	0.898186	146.0	0.115634D+00	0.152266D+00	52.79	0.036556
147.0	0.117019D+01	0.121309D+00	5.92	1.384055	147.0	-0.463148D+01	-0.115865D+00	-111.86	0.015178
148.0	0.906598D+00	-0.518661D+00	-28.69	1.089065	148.0	-0.177637D+00	-0.743255D+00	-117.36	0.149379
149.0	0.160501D+01	-0.814822D+00	-88.87	0.684193	149.0	-0.186824D+00	-0.390819D+00	-118.04	0.157977
150.0	-0.903844D+00	-0.587564D+00	-148.97	1.162166	150.0	-0.667481D+01	-0.936699D-01	-125.47	0.013229
151.0	-0.121617D+01	0.125015D-01	179.41	1.479222	151.0	0.995999D+01	0.278669D+00	70.33	0.087576
152.0	-0.687309D+00	0.596222D+00	139.05	0.928211	152.0	0.196688D+00	0.502623D+00	68.63	0.291314
153.0	0.334631D+00	0.789725D+00	67.04	0.735643	153.0	0.157222D+00	0.381822D+01	67.62	0.170507
154.0	0.114360D+01	0.472017D+00	22.43	1.530616	154.0	0.929335D+02	-0.512162D+01	-79.72	0.002710
155.0	0.116160D+01	-0.147902D+00	-7.26	1.371200	155.0	-0.343592D+00	-0.519806D+00	-105.44	0.520817
156.0	0.353631D+00	-0.668274D+00	-62.11	0.571645	156.0	-0.195338D+00	-0.671137D+00	-106.22	0.489878
157.0	-0.127513D+00	-0.754331D+00	-134.00	1.096935	157.0	-0.111460D+00	-0.332370D+00	-108.49	0.123467
158.0	-0.137490D+01	-0.549217D+00	-165.13	1.850911	158.0	0.477765D+01	0.323043D+00	81.59	0.106642
159.0	-0.970111D+00	0.282834D+00	163.75	1.021111	159.0	0.170766D+00	0.450344D+00	78.64	0.752211
160.0	0.882506D+01	0.723761D+00	83.14	0.566193	160.0	0.173425D+00	0.416760D+00	78.01	0.697172
161.0	0.116770D+01	0.708879D+00	32.44	1.751108	161.0	0.570279D+01	0.139410D+00	67.75	0.022687
162.0	0.134499D+01	0.222077D+00	9.24	1.912510	162.0	-0.949180D+01	-0.700432D+00	-96.90	0.328171
163.0	0.620667D+00	-0.419092D+00	-34.03	0.560866	163.0	-0.177036D+00	-0.124507D+01	-97.84	1.682751
164.0	-0.612161D+00	-0.799844D+00	-127.43	1.040492	164.0	-0.135745D+00	-0.033773D+00	-98.78	0.790563
165.0	-0.144874D+01	-0.667085D+00	-155.28	2.543861	165.0	-0.415909D+02	0.321876D+00	90.74	0.103622
166.0	-0.125237D+01	-0.928072D+01	-175.76	1.577051	166.0	0.124475D+00	0.155883D+01	85.43	2.445451
167.0	-0.112436D+01	0.562056D+00	101.25	0.319330	167.0	0.163375D+00	0.195872D+01	84.97	3.481579
168.0	0.118309D+01	0.883381D+00	36.78	2.118288	168.0	0.918470D+01	0.126106D+00	82.79	0.535459
169.0	0.168506D+01	0.643332D+00	20.90	3.253297	169.0	-0.134928D+01	-0.134928D+01	-91.55	1.821902
170.0	0.965104D+00	-0.338231D-01	-2.01	0.932570	170.0	-0.133373D+00	-0.358637D+01	-92.56	0.939203
171.0	-0.543297D+00	-0.742971D+00	-126.18	0.647178	171.0	-0.138118D+00	-0.249292D+01	-92.94	7.278882
172.0	-0.160454D+01	-0.103325D+01	-150.06	4.336114	172.0	-0.549080D+01	0.500880D+01	137.67	0.905533
173.0	-0.187987D+01	-0.704445D+00	-159.46	4.020159	173.0	0.565421D+01	0.404331D+01	89.20	16.353738
174.0	-0.584395D+00	0.119612D+00	169.43	0.355824	174.0	0.126250D+00	0.455039D+01	88.90	42.923386
175.0	0.136369D+01	0.101258D+01	36.60	2.884955	175.0	0.117895D+00	0.448535D+01	88.49	20.132392
176.0	0.281951D+01	0.152306D+01	26.39	10.263724	176.0	0.441987D+01	-0.389714D+01	-89.35	15.189669
177.0	0.298333D+01	0.143284D+01	25.65	10.953314	177.0	-0.523747D+02	-0.177105D+02	-90.17	313.665688
178.0	0.194693D+01	0.879269D+00	24.30	4.563660	178.0	-0.132266D+00	-0.332850D+02	-90.23	1110.808195
179.0	0.601754D+00	0.263292D+00	22.63	0.431431	179.0	-0.178533D+00	-0.456737D+02	-90.22	2086.121744
180.0	0.205921D+08	0.350666D+08	59.58	0.000000	180.0	-0.192873D+00	-0.503635D+02	-90.22	2536.519119

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SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER 18 ESD-TR-76-217	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) 6 Circular Polarization Scattering Coefficients for the Bistatic Scattering of Electromagnetic Waves from Perfectly Conducting Spheres.	7 5. TYPE OF REPORT & PERIOD COVERED Technical Note	
7. AUTHOR(s) 10 R. Alexander/Ross and Gary N./Cohen	15 6. PERFORMING ORG. REPORT NUMBER Technical Note 1976-34	
9. PERFORMING ORGANIZATION NAME AND ADDRESS Lincoln Laboratory, M. i. T. P.O. Box 73 Lexington, MA 02173	8. CONTRACT OR GRANT NUMBER(s) F19628-76-C-0002	
11. CONTROLLING OFFICE NAME AND ADDRESS Air Force Systems Command, USAF Andrews AFB Washington, DC 20331	10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS Program Element No. 633ME Project No. 627A	
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office) Electronic Systems Division Hanscom AFB Bedford, MA 01731	11 12. REPORT DATE 27 July 1976	
12 13. NUMBER OF PAGES 108	15. SECURITY CLASS. (of this report) Unclassified	
16. DISTRIBUTION STATEMENT (of this Report) Approved for public release; distribution unlimited.	15a. DECLASSIFICATION DOWNGRADING SCHEDULE	
14 TN-1976-34		
16 AF-627A		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES None		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) bistatic scattering conducting spheres electromagnetic waves radar cross section		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) The scattering by a number of perfectly conducting spheres has been calculated as a function of bistatic angle for both principal circular polarizations. Normalized radar cross section and scattering phase are tabulated for body circumference in wavelengths equal to 1.0(1.0)10.0, 15.0(5.0)50.0 with bistatic angles 0.0(1.0)180.0 degrees. Selected graphs precede the tables.		

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